



Ax73RM, 5MP Infrared Outdoor IP Dome Camera w/ Motorized Lens

User Guide



Rev. 141203

CONTENTS

1. Warnings and operation notes.....	3
2. Unpacking.....	5
3. Installation.....	6
4. Mounting.....	10
5. Connecting Ax73RM to the SRX-Pro Server.....	17
6. Advanced Camera Setup.....	25
7. Specifications.....	53

Please read this guide carefully before you install the dome camera. Keep this guide for future reference.

Ax73RM-series User Guide

COPYRIGHT © 2014 by i3 International, Inc. All rights reserved.

No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including but not limited to, photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the copyright owner and the publisher.

Annexus is a registered trademark of i3 International Inc.

Table of Contents

1. Warnings and operation notes
2. Unpacking
3. Accessories
4. Installation
5. Mounting
6. Connecting Ax73RM to the SRX-Pro Server
7. Advanced Camera Setup
8. Specifications

Disclaimer

This quick start guide is provided as is, without warranty of any kind, expressed or implied, including but not limited to performance, merchantability, or fitness for any particular purpose. Neither i3 International Inc. nor its dealers or distributors shall be liable to any person or entity with respect to any liability, loss, or damage, caused or alleged to have been caused directly or indirectly by this information.

Furthermore, i3 International Inc. reserves the right to revise this publication, and to make changes to the content at any time, without notice.

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Address:

i3 International Inc.
780 Birchmount Road, Unit 16
Scarborough, ON M1K 5H4
Canada

Contact us:

Tech Support: 1.877.877.7241
Email: support@i3international.com
Web Site: www.i3international.com

1. Warnings and operation notes

**Please read this guide carefully before you install the dome camera.
Keep this guide for future reference.**

Thank you for purchasing an i3 73RM-series camera.

If the system needs to be modified or repaired, contact a certified i3 International Dealer/Installer. When serviced by unauthorized technician, the system warranty will be voided. Should you have any problems or questions regarding our products, contact your local i3 International Dealer/Installer.

Camera's default IP address is **192.0.0.16**

Camera's default Subnet mask address is **255.255.255.0**.

Default camera User Name: **i3admin** and default Password: **i3admin**

1.1 Precautions

Installation and serving should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.



WARNING! To reduce the risk of fire or electric shock, do not expose the product to rain or moisture.

When installing your Ax73RM camera be sure to avoid:

- excessive heat, such as direct sunlight or heating appliances
- contaminants such as dust and smoke
- strong magnetic fields
- sources of powerful electromagnetic radiation such as radios or TV transmitters
- moisture and humidity
- areas with mechanical vibrations
- fluorescent lamps or objects that reflect light
- unstable light sources as this may cause flickering
- temperatures below -40° Celsius or -40° Fahrenheit and above 50° Celsius or 122° Fahrenheit.

1.2 Power Supply

Ax73RM Power consumption requirement: AC 24V/ PoE (IEEE 802.3af Class 0). Ensure the supplied voltage meets the power consumption requirements of this camera before powering the camera on. Incorrect voltage may cause irreparable damage to the video camera and will effectively void the camera warranty.

PoE power is supported.

Power supply terminal/adaptor for I/O connectors and field wiring must comply with the Class 2 Circuit standard in order to ensure against electrical fires and provide acceptable protection against electrical shock.

1.3 Cleaning

- For maximum optical clarity, the camera or lens must remain clean. Use a soft, dry cloth to remove finger prints and dust from the dome cover.
- Use a blower to remove dust from the lens.
- Clean the body with a soft, dry cloth. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent, then wipe dry.
- Do not use volatile solvents such as alcohol, benzene, or thinners, as they may damage the surface finish.

1.4 Servicing

To avoid electrical shock and to preserve the product warranty, DO NOT disassemble the camera. Refer servicing to qualified personnel only.

1.5 Routine Maintenance

- The dome bubble is an optical part. Use a soft and dry cloth to remove any fingerprints and dust.
- Clean the camera housing with a soft and dry cloth. For more stubborn marks, use a cloth dampened with a small quantity of neutral detergent, then wipe dry.
- **CAUTION: Do not use volatile solvents such as alcohol, benzene or thinners, as they may damage the surface finish.**

2. Unpacking

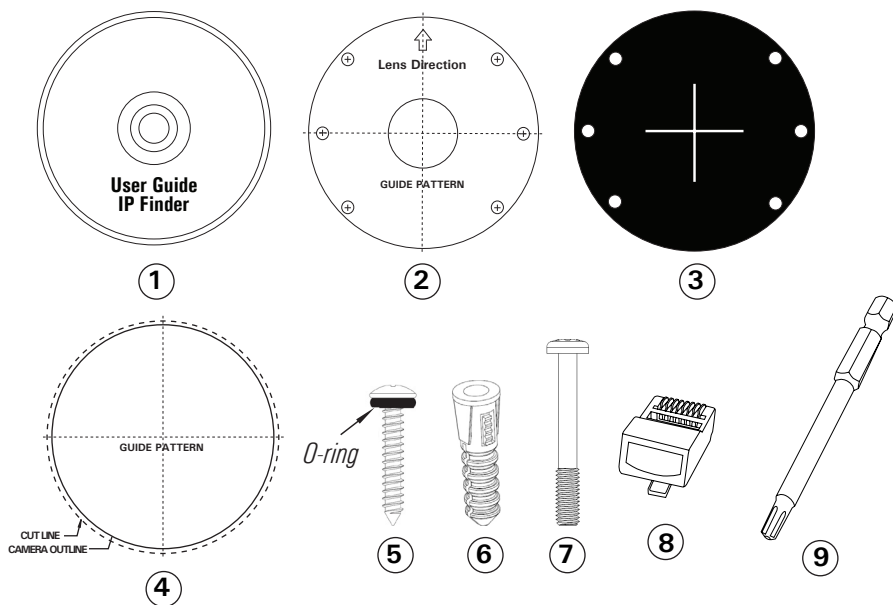
Ensure that the items received match those listed on the order form and the packing slip. In addition to this manual and a fully assembled camera, the dome camera packing box includes:

1. User Manual and Annexus Finder CD x1
2. Surface Mount template x1
3. Rubber gasket x1. Use in all outdoor installations.
4. Flush Mount template x1
5. Round Head Screw (Tapping Type) with O-ring x4
6. Plastic Anchor x4
7. Long Screws for Flush Mount w/Back Box installations x3
8. Standard RJ45 Connector x2
9. Security Torx bit x1

If any parts are missing or damaged, contact the dealer you purchased the camera from.

***Note:** Based on installation location and surface type, supplied screws and anchors may not be adequate. Mounting hardware is site-specific and may need to be supplied by the installer.

2.1. Accessories (not to scale)

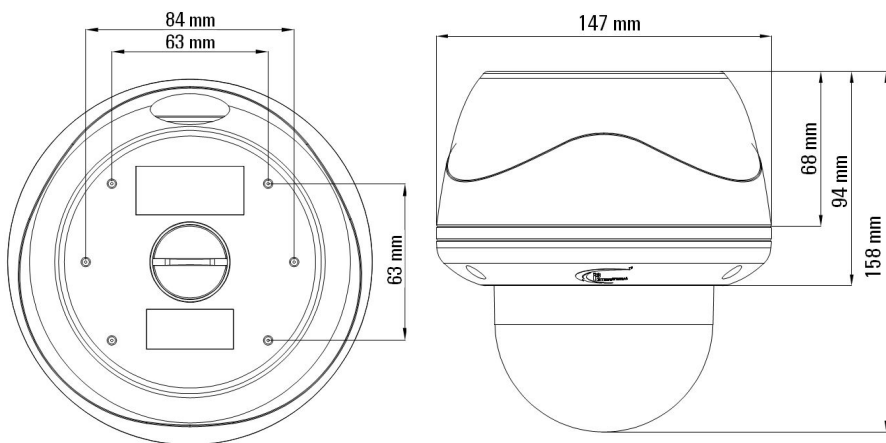


3. Installation

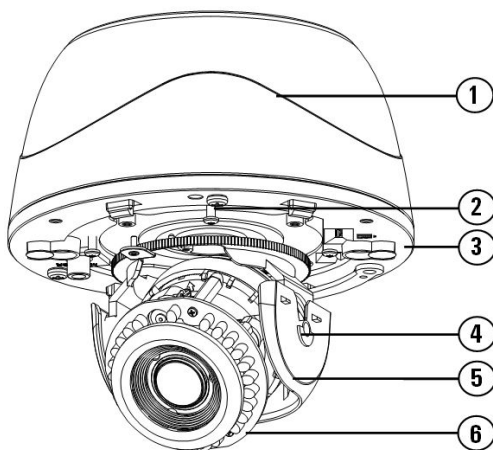
This dome camera is suitable for both indoor and outdoor installation in commercial and residential environment. With 3-axis mount support, it provides flexible installation on a ceiling or wall, even on an angle. The dome camera is a fully integrated enclosure with camera and lens.

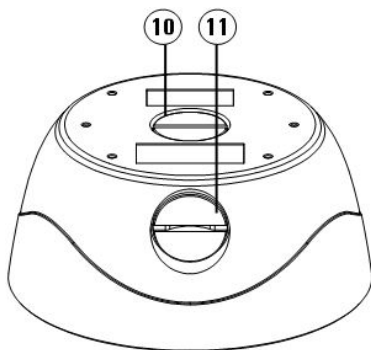
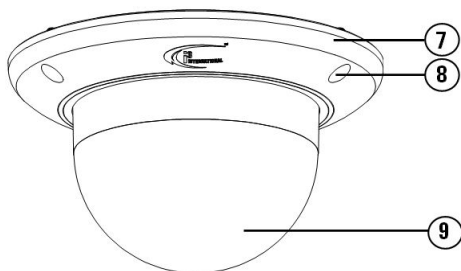
Note: The six holes on top of the Ax73RM camera are not drilled all the way through for moisture control. Use rubber O-rings when mounting the camera.

3.1 Dimensions & Parts Identification



1. Camera's back box
2. Screws attaching camera module to the back box (x3, silver)
3. Camera module / second housing
4. Tilt bracket with locking screws
5. Inner liner / Shroud
6. IR board



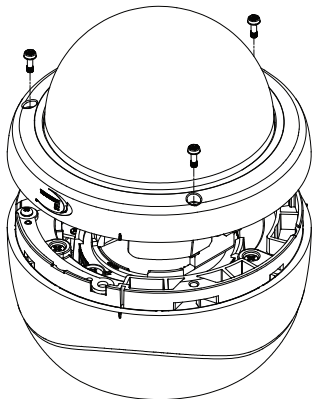


7. Dome bubble housing / Dome cover
8. Screws securing the dome bubble housing to camera module (x3, silver)
9. Lexan bubble
10. 3/4" Top conduit hole. During installation, sealant must be used to maintain the IP66 status.
11. 3/4" Side conduit hole. During installation, sealant must be used to maintain the IP66 status.

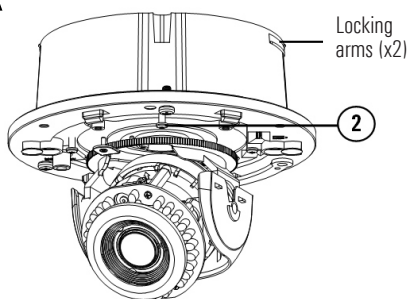
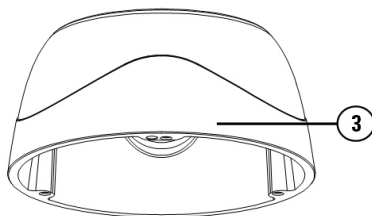
3.2 Disassembling the Camera

Before mounting and adjusting the camera, follow these steps to disassemble the camera.

1. Use the provided security Torx key to loosen three screws securing the dome bubble housing to camera module (#8). Do not completely remove the screws from the dome bubble. Lift the dome bubble off and set aside.



2. Next, loosen three silver screws attaching camera to the back box.
3. Remove camera's back box and set aside.



3.3 I/O Connectors

Once the camera dome bubble has been removed, Ax73RM input/output connectors will be revealed on the camera's module, including the microSD slot, Factory Reset and Factory Default, analog RCA video jack, RJ-45 Ethernet/PoE connector, Audio and Alarm connectors as well as a AC24V port.

Figure 3.3.1 Camera module, with the back box removed. I/O connectors.

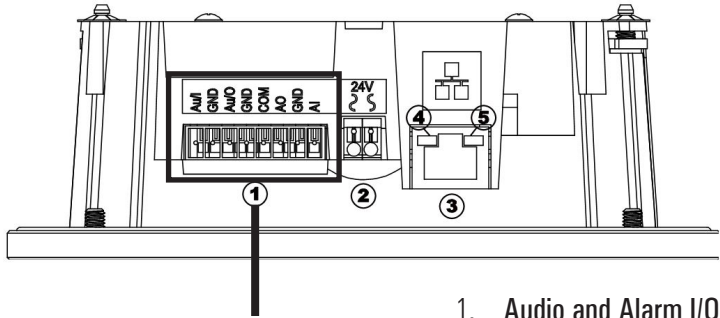
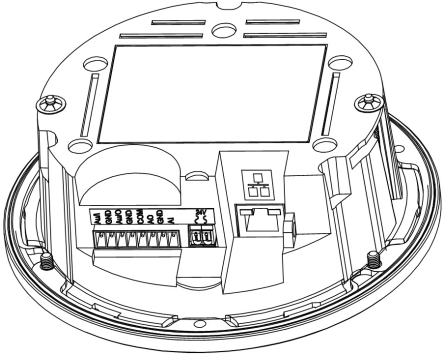


Figure 3.3.2 Camera module, with the back box removed. Side view, I/O connectors.

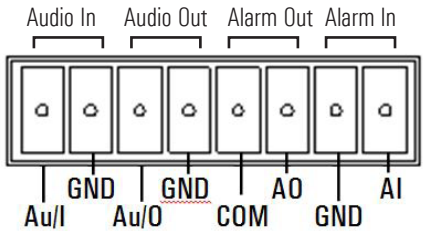


Figure 3.3.3 Audio/Alarm I/O connectors

1. **Audio and Alarm I/O connectors.**
2. **AC 24V Port.** Connect AC 24V power supply.
3. **RJ-45 Ethernet Connector / PoE.** Connect RJ-45 network cable for Ethernet/internet connectivity. PoE (Power over Ethernet) is supported.

NOTE on Power:

Do not apply power until the camera is properly and securely mounted.

4. **Orange LED.** Flashing orange LED indicates data transmission between the camera and the Internet.
5. **Green LED.** Solid green LED indicates a current live connection.

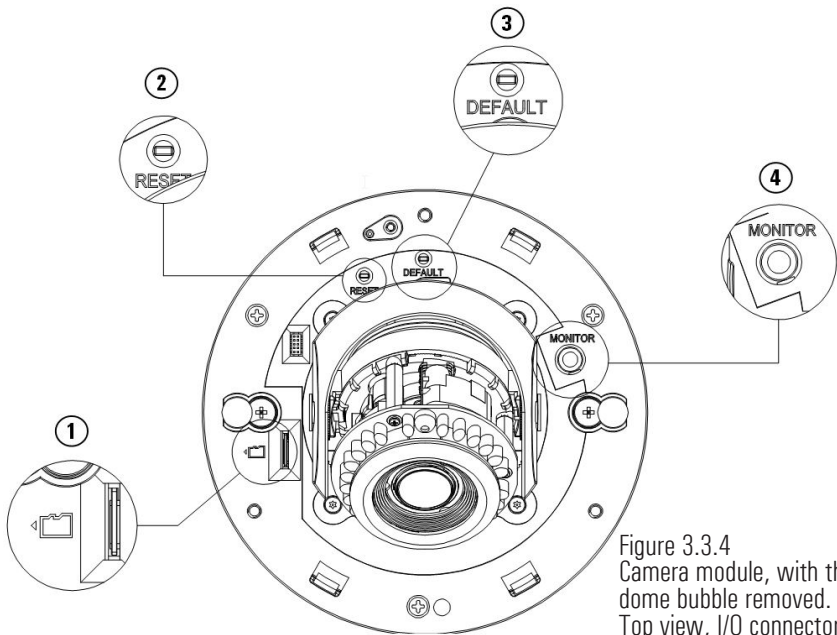


Figure 3.3.4
Camera module, with the
dome bubble removed.
Top view, I/O connectors.

1. **Micro SD card slot.** Insert a micro SDHC card for backup/emergency recording and/or storage.
2. **Reset button.** (Camera Reboot)
Use a sharp object to Press the Reset button, the camera will be rebooted.
3. **Default button.** (Return all settings to factory default)
Use a sharp object to press the Reset button for 5 seconds. All camera settings will be returned to factory default.
4. **Monitor out RCA video jack.**
Connect analog monitor to Monitor Out jack during installation to camera view.

3.4 Connecting the Wiring

Once disassembled, prepare the camera for installation by connecting all desired inputs to the I/O connectors.

1. Connect Audio and Alarm wires to the 8-pin terminal block according to the wiring diagram in *Figure 3.3.3 (see p.8)*.
2. Insert micro SDHC card into Micro SD card slot on the camera module. *See Figure 3.3.4 on p. 9 for the slot location.*
3. Connect the camera power, choose one of the two available power options:
 - a. AC 24V: Insert power cable for AC 24V power supply to the AC 24V Port on the side of the camera module. *See Figure 4.3.2 on p. 8 for the AC power port location.*
 - b. PoE (IEEE 802.3af Class 0): Insert the RJ-45 cable into the RJ-45 jack on the side of the camera module. *See Figure 4.3.2 on p.8 for the RJ-45 jack location.* Connect the other end of the RJ-45 cable to a compatible PoE switch/hub/router.

4. Mounting

Start by marking out and preparing the mounting surface.

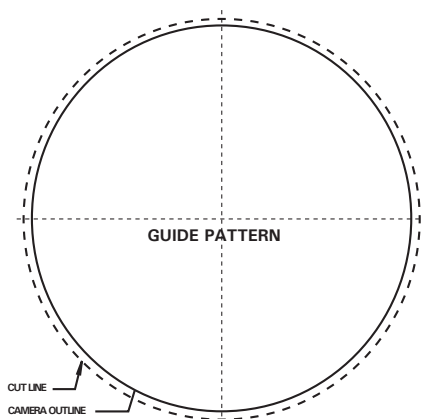
Select either Flush or Surface Mount template, depending on your installation.

Attach the supplied mounting template to the mounting surface.

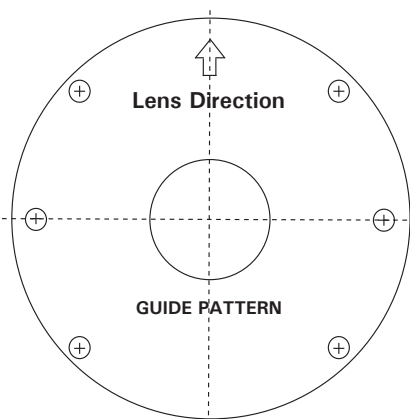


Important. Please Read:

- Use the supplied rubber gasket for all outdoor installations.
- Use sealant to maintain IP66 rating when installing outside.
- It is the installer's responsibility to ensure that the mounting surface is suitable for the chosen installation method.
- Based on installation location and surface type, supplied screws and anchors may not be adequate.
- Mounting hardware is site-specific and may need to be supplied by the installer.



Flush Mount Template



Surface Mount Template



Note on IR-LED light:

It is recommended to keep the camera tilt angle at $>17^\circ$. IR-LED light reflection may interfere with the normal camera performance in installations where tilt angle is $< 17^\circ$.

4.1 Flush Mounting w/ locking arms (indoor)



Note on supplied mounting hardware:

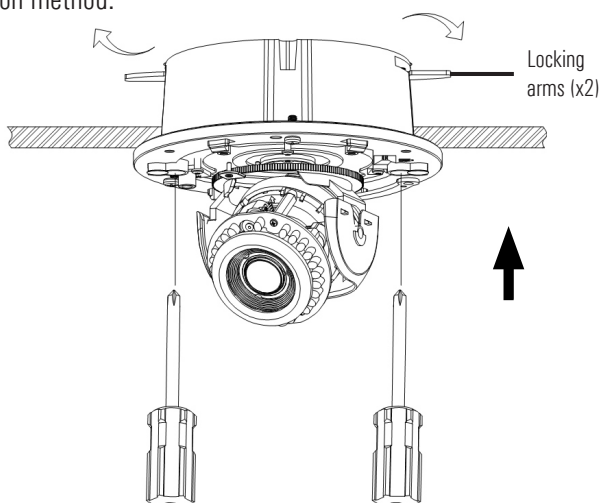
Based on installation location and surface type, supplied screws and anchors may not be adequate. Mounting hardware is site-specific and may need to be supplied by the installer.

This **indoor** installation method is suitable for drywall and T-bar installations only.

Do not use this mounting method for outdoor installations.

Do not use camera's back box for this installation method.

Note: It is the installer's responsibility to ensure that the mounting surface is suitable for installation method.



1. Use the Flush Mounting Template to cut a hole into the mounting surface. Insert the camera inside the surface opening.
2. Turn two black-coloured screws on the camera module clockwise to engage the locking arms. Tighten the arms securely against the mounting surface.
3. Adjust the lens angle by rotating and panning the camera lens base. Do not over-rotate the camera lens beyond the stop point to avoid damage to the camera. Keep the camera tilt angle at $>17^\circ$. *See section 4.6 for more info.*
Tip: For the ease of setup, lift off the camera liner while adjusting the lens position.
4. Once the desired view has been achieved, replace the camera liner until it snaps back into place.
5. Replace the camera dome housing on top of the camera module. Use the red dots on both modules for easy alignment.
6. Use the supplied Torx bit to re-tighten 3 silver screws securing the dome bubble housing to the camera module.

4.2 Flush Mounting w/ Back Box (indoor)

This **indoor** installation method is suitable for drywall and T-bar installations only. Do not use this mounting method for outdoor installations.

Note: It is the installer's responsibility to ensure that the mounting surface is suitable for installation method.

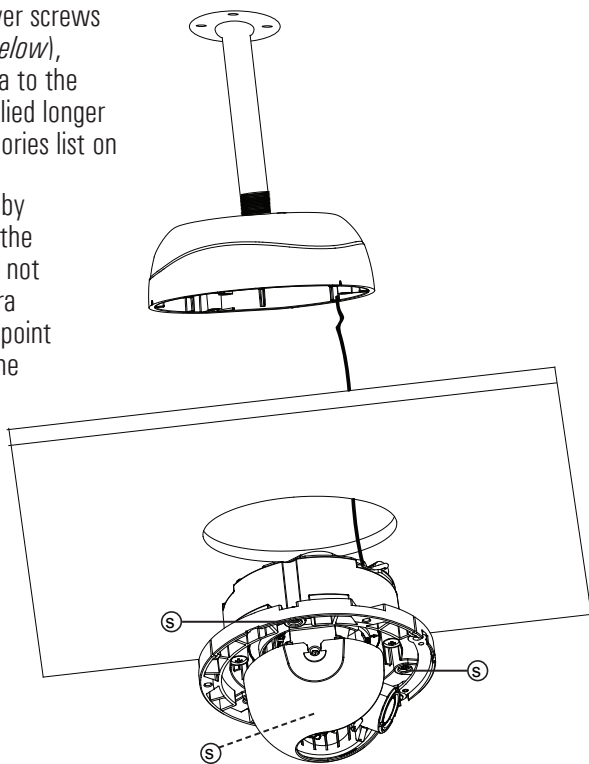
1. Use the Flush Mounting Template to cut a hole into the mounting surface. Insert the camera inside the surface opening.
2. Remove the bottom case of the camera. (*Refer to Section 3.2*) and attach to $\frac{3}{4}$ " NPT pipe (EMT or Rigid) ensuring the back box is flush with the T-bar tile.

3. Remove 3 shorter silver screws ("s" on the diagram below), and fasten the camera to the back box with 3 supplied longer screws (#7 on Accessories list on page 5).

4. Adjust the lens angle by rotating and panning the camera lens base. Do not over-rotate the camera lens beyond the stop point to avoid damage to the camera. Keep the camera tilt angle at $>17^\circ$. See section 4.6 for more info.

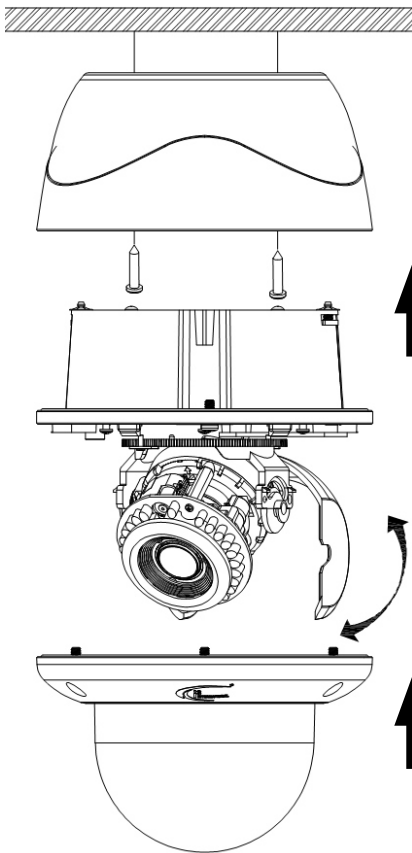
Tip: For the ease of setup, lift off the camera liner while adjusting the lens position.

5. Once the desired view has been achieved, replace the camera liner until it snaps back into place.
6. Replace the camera dome housing on top of the camera module. Use the red dots on both modules for easy alignment.
7. Use the supplied Torx bit to re-tighten 3 silver screws securing the dome bubble housing to the camera module.



4.3 Surface Mounting

This installation method is suitable for both indoor and outdoor applications.



1. Use the Surface Mount Template to drill 6 mm (0.2") outer holes at the marked template positions on the mounting surface.
2. Insert the supplied screw anchors into the holes on mounting surface.
3. Based on installation requirements, use either the side or the top 3/4" conduit hole to feed the camera wiring through. Connect the wiring.
4. If you feeding the wiring from the hole on the top of camera's back box, drill a 3/4" circular opening in the mounting surface, corresponding to the bottom conduit hole of mounting template.
5. If feeding wiring from the side of camera's back box, no additional openings are required on the mounting surface.
6. Mount camera's back box to the surface.
7. Use the supplied Torx bit to secure the camera module to camera's back box with the three silver screws. Use the red dots on both modules for easy alignment.
8. Adjust the lens angle by rotating and panning the camera lens base.

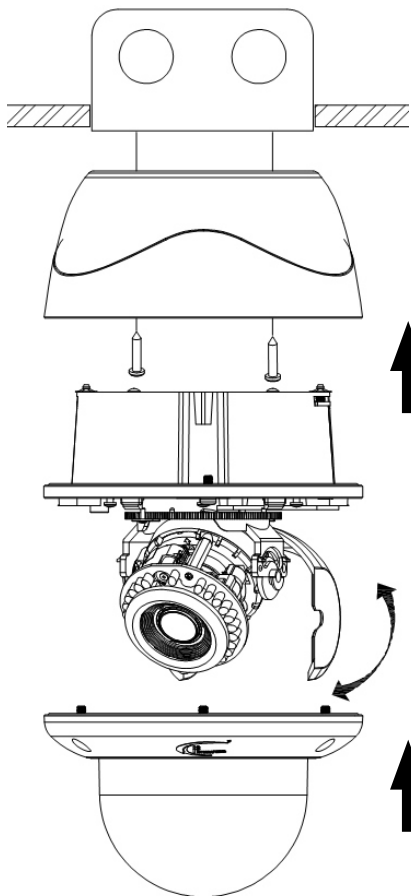
Do not over-rotate the camera lens beyond the stop point to avoid damage to the camera. *See section 4.5 for more info.* Keep the camera tilt angle at $>17^\circ$.

Tip: For the ease of setup, lift off the camera liner while adjusting the lens position.

9. Once the desired view has been achieved, replace the camera liner until it snaps into place.
10. Replace the camera dome housing on top of the camera module. Use the red dots on both modules for easy alignment.
11. Use the supplied Torx bit to re-tighten 3 silver screws securing the dome bubble housing to the camera module.
12. Remember to use sealant to maintain IP66 rating.

4.4 Surface Mounting w/ Junction box

This installation method is suitable for both indoor and outdoor applications.

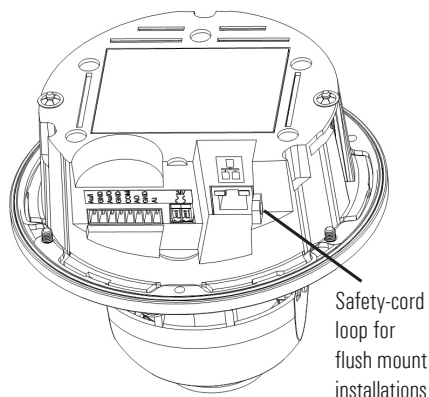


1. Use the top 3/4" conduit hole to feed the camera wiring through. Tie in the wiring into the junction box.
2. Secure camera's back box to the junction box with the supplied screws.
3. Use the supplied Torx bit to secure the camera module to camera's back box with the three silver screws.
Use the red dots on both modules for easy alignment.
4. Adjust the lens angle by rotating and panning the camera lens base. Do not over-rotate the camera lens beyond the stop point to avoid damage to the camera. See section 4.5 for more info.
Keep the camera tilt angle at $>17^\circ$.
Tip: For the ease of setup, lift off the camera liner while adjusting the lens position.
5. Once the desired view has been achieved, replace the camera liner until it snaps into place.
6. Replace the camera dome housing on top of the camera module. Use

the red dots on both modules for easy alignment

7. Use the supplied Torx bit to re-tighten 3 silver screws securing the dome bubble housing to the camera module.
8. Remember to use sealant to maintain IP66 rating.

4.5 Safety Cord for Flush Mount Installation



Safety cord (sold separately) is recommended for flush mount installations to prevent accidental camera drops that may result in personal injury.

Secure one end of the safety cord to your mounting surface. Secure the other end to the safety cord loop located on the camera module, next to the RJ-45 Ethernet Connector.

4.6 Adjusting the Lens Position

Axis angle range

Pan range: $+164^{\circ} \sim -190^{\circ}$

Horizontal rotation range: $\pm 177^{\circ}$

Tilt range: $0^{\circ} \sim 80^{\circ}$ (values $>17^{\circ}$ are recommended)



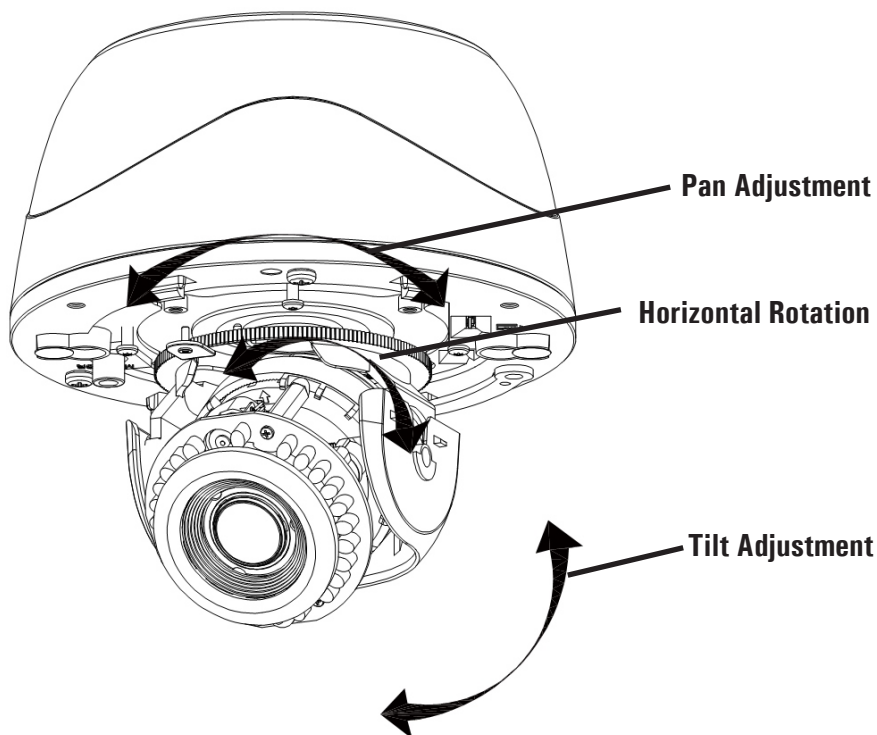
Note on IR-LED light:

It is recommended to keep the camera tilt angle at $>17^{\circ}$. IR-LED light reflection may interfere with the normal camera performance in installations where tilt angle is $<17^{\circ}$.

Ax73RM camera allows adjusting the field of view along three axis: Pan, Tilt and Horizontal rotation. Use a spot monitor to achieve the desired field of view. RCA video jack is located on the camera module (orange RCA jack).

Lift off the camera liner, then proceed with the lens position adjustment.

3-Axis lens position adjustment



Pan Adjustment

Rotate the lens base (max 354°) until satisfied with the field of view.

Note: Do not over-rotate past the side conduit hole (located on the camera's back box).

Horizontal Rotation

Firmly grasp the camera lens assembly and rotate counter-clockwise / clockwise (max 354°) until satisfied with the field of view.

Note: Over-rotation past 354° will cause internal cables to become damaged, disconnected, or twisted.

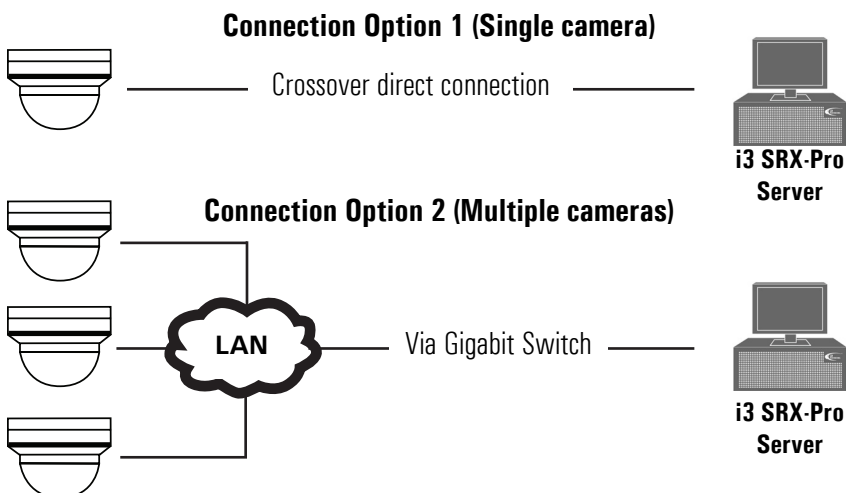
Tilt Adjustment

Tilt the camera lens (max 80°) until satisfied with the field of view.

Once the desired view has been achieved, replace the camera liner until it snaps into place.

5. Connecting Ax73RM to SRX-Pro Server

5.1 Network Topology Options



5.2 Hardware/Software Requirements

The following requirements must be met to achieve a successful network connection with the Ax73RM-series IP camera.

SRX-Pro Server

- i3 SRX-Pro Version 3.0 or higher
- Latest GiPi adapter is installed. GiPi adapters can be downloaded from i3 Downloads web page. (Please contact i3 Technical Support for more information.)
- Windows XP, XPe, 7 Pro or 7e
- **Internet Explorer Version 8.0 or later**
- CPU: Intel Pentium Core 2 or higher
- Memory: 1GB or more
- VGA card--supporting DirectX 9.0 or above

Power Supply

PoE power is supported in the indoor (Ax73RMD-series) installations.

Note: Camera damages resulted from improper power application are NOT covered by the camera warranty.

Switch

A Gigabit Switch is required to monitor two or more cameras from the same SRX-Pro Server.

5.3 Configuring Internet Explorer for Video Display

Your Internet Explorer (v.8.0 or higher) must first be configured in order to properly display video stream from your Annexus camera.

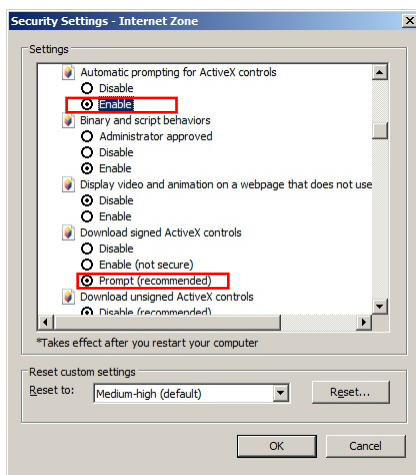
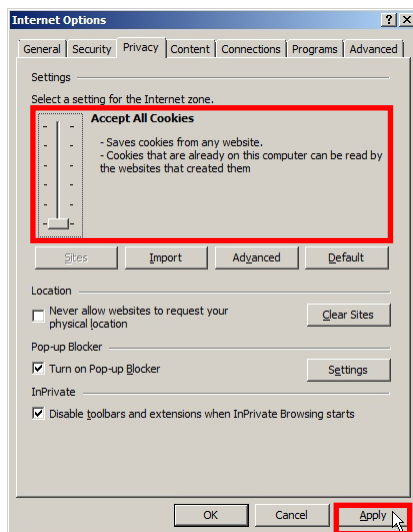
Follow these instructions to configure your Internet Explorer browser.

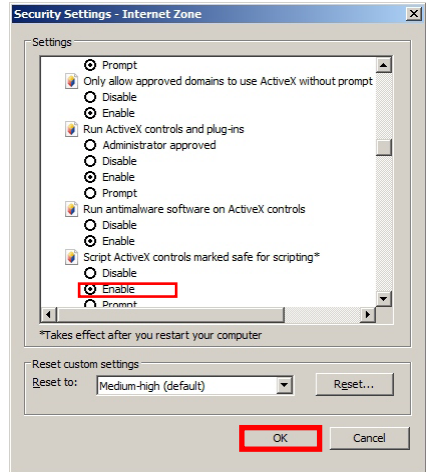
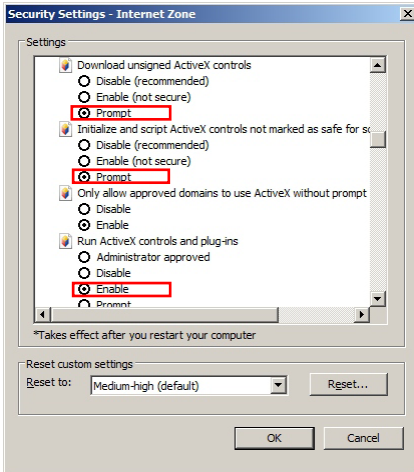
Enable Cookies

1. In Internet Explorer window, click **Tools -> Internet Options**
2. Open **Privacy** tab, move the slider to "Low" or "Accept All Cookies"
3. Click **Apply**. Do not close the Internet Options window.

Adjust Internet Security Settings

1. Open **Security** tab in the Internet Options window
2. If the camera operates inside of the Intranet, click the **Intranet** icon; If the camera operates outside of the Intranet, click the **Internet** icon.
3. Click **Custom Level**. Security Settings - Internet Zone window will be displayed.
4. Scroll down to the **ActiveX controls and plug-ins** radio buttons and configure as follows:
 - » Automatic prompting for ActiveX controls -> **Enable**
 - » Download signed ActiveX controls -> **Prompt** (recommended)
 - » Download unsigned ActiveX





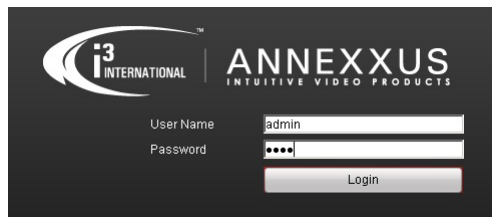
controls -> **Prompt**

- » Initialize and script ActiveX not marked as safe for scripting -> **Prompt**
- » Run ActiveX controls and plug-ins -> **Enable**
- » Script ActiveX controls marked safe for scripting -> **Enable**

5. Click **OK** to save the Internet Security Settings
6. Close all Microsoft Internet Explorer windows and open a new IE window. This will allow the new settings to take effect.

5.4 Testing Ax73RM Camera in Internet Explorer

1. Open a new Internet Explorer window.
2. Enter Ax73RM camera default IP address: **192.0.0.16**
3. In the Annexus login screen, enter the default camera user name: **i3admin** and default password: **i3admin**
4. Annexus camera interface will be displayed in the Internet Explorer window. Live video stream will be displayed on the screen. If you do not see live video image on the screen, call i3 International tech support for help.
5. Proceed to the following sections to assign a unique IP address to your Ax73RM camera and to add it to your SRX-Pro Server.



Note: You may be required to install ActiveX Controller in the IE browser before being able to view camera's live view video stream.

5.5 Assigning New IP Address to Ax73RM with Annexus Finder.

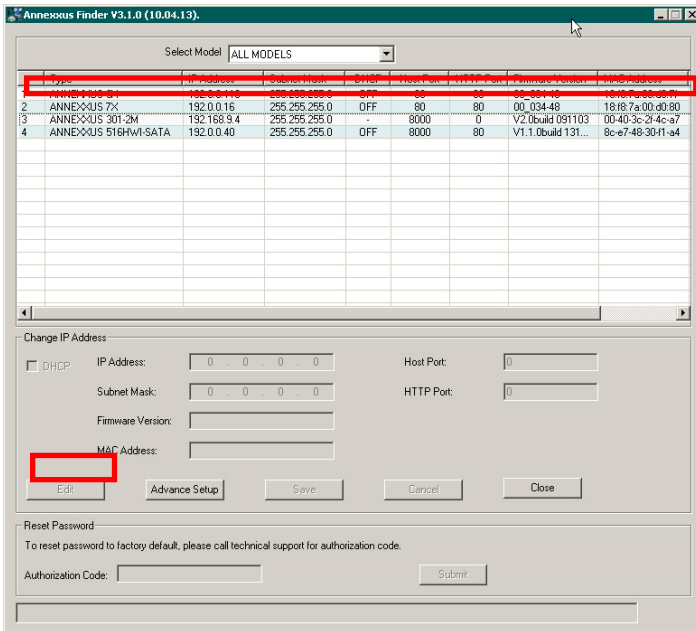
Camera's default IP address is **192.0.0.16**

Camera's default Subnet mask address is **255.255.255.0**.

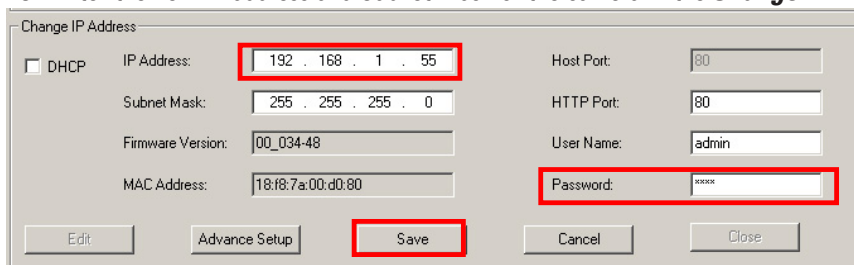
Default camera User Name: **i3admin** and default Password: **i3admin**

To add your Annexus IP camera to SRX-Pro Server, assign a unique IP address:

1. Close SRX-Pro Server software by pressing **Alt+Shift+Ctrl+F4**.
2. Change the IP address on the onboard NIC (LAN) (or on NIC1 if your SRX-Pro Server has two onboard NIC cards) of your SRX-Pro Server to **192.0.0.XXX** to match the default IP range of your Annexus IP camera.
3. Connect the network cable from the SRX-Pro Server (crossover direct connection) or from the Gigabit switch to your Annexus camera.
4. Turn on your Annexus camera.
5. Locate the CD that came with your Annexus camera and insert it in the CD-ROM drive of your SRX-Pro Server.
6. Double-click "AnnexusFinder.exe" file to install Annexus Finder application. Annexus Finder application discovers all Annexus cameras connected to your network.
7. Follow the Annexus Finder installation instructions until the application has been successfully installed on your SRX-Pro Server.



8. Double-click Annexus Finder icon on the Desktop to launch the application. The application window will appear displaying a list of active network cameras
9. Next, select desired camera in the Annexus Finder software by double-clicking it in the list and click **Edit**.
10. Enter the new IP address and Subnet Mask of the camera in the **Change IP**



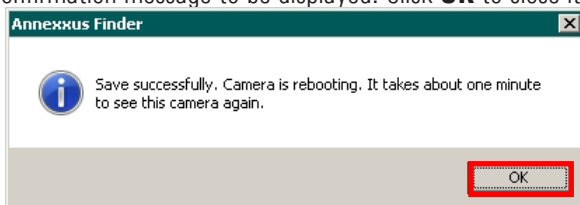
The 'Change IP Address' dialog box contains the following fields and buttons:

- ☐ DHCP
- IP Address: 192 . 168 . 1 . 55
- Subnet Mask: 255 . 255 . 255 . 0
- Firmware Version: 00_034-48
- MAC Address: 18:f8:7a:00:d0:80
- Host Port: 80
- HTTP Port: 80
- User Name: admin
- Password: ****
- Buttons: Edit, Advance Setup, Save, Cancel, Close

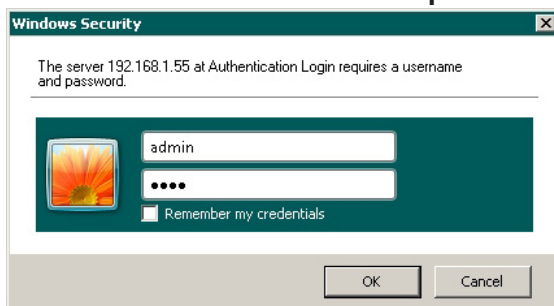
Address area. The new camera IP address must match the original range of your SRX-Pro LAN or NIC1 card. E.g. If your original SRX-Pro Server's IP address was 192.168.1.122, change your Annexus camera's IP address to 192.168.1.XXX.

Remember: Annexus Cameras cannot share an IP address, each camera requires its own unique IP address.

11. Enter the default camera password: **i3admin** in the Input Password field and click **Save**.
12. Wait a few moments as the new IP address is being applied to your Annexus camera. Wait for the confirmation message to be displayed. Click **OK** to close it.
13. Repeat Steps 1-12 for all detected Annexus cameras in the Annexus Finder.
14. Now that the new IP address has been successfully assigned to your camera, make sure you can connect to it through the Internet Explorer:



15. Select the camera in Annexus Finder list and click **Advance Setup** button. Password window will be displayed.
16. Enter the default camera User Name: **i3admin** and default Password: **i3admin**
17. Annexus camera interface will be displayed in the Internet



The 'Windows Security' window shows a message: 'The server 192.168.1.55 at Authentication Login requires a username and password.' Below the message is a login form with fields for 'admin' and a password (represented by dots), and a 'Remember my credentials' checkbox. 'OK' and 'Cancel' buttons are at the bottom.

Explorer window. Live video stream will be displayed on the screen. If you see Live video image, the IP address has been successfully changed. Proceed to the next section.

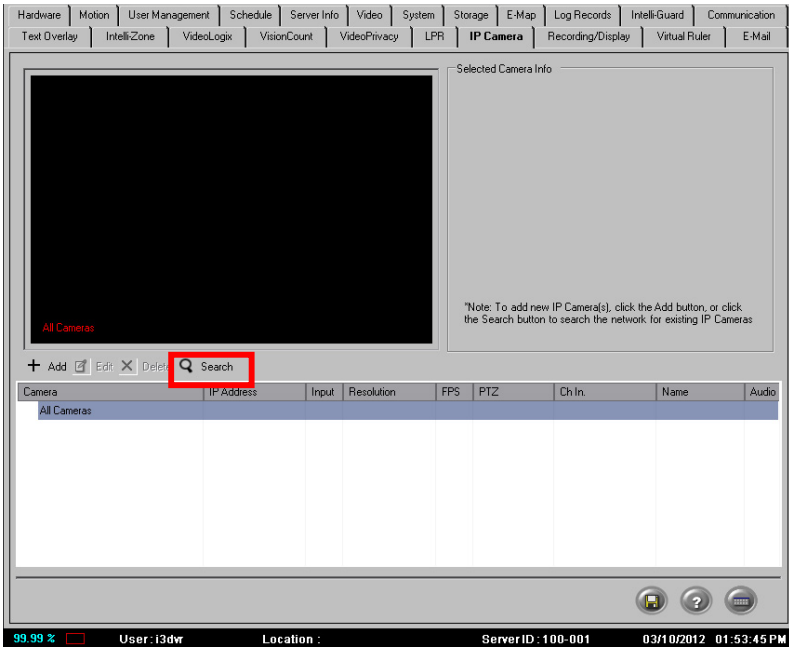
Note: If you do not see live video image on the screen, call i3 International tech support for help.



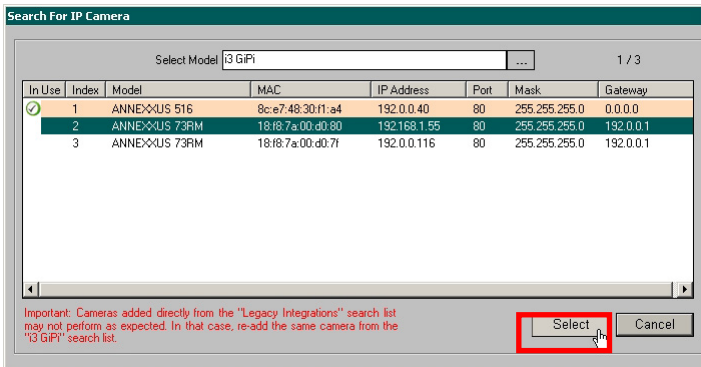
5.6 Adding your IP Camera to your SRX-Pro Server

1. Make sure that the latest version of GiPi updater is installed on your SRX-Pro Server. You can download the updates from <http://i3international.com/index.php/software-downloads>
2. Once the latest GiPi updater has been installed, restart i3 SRX-Pro Server software.
3. Log In and go to the Setup -> IP Camera tab.

- Click the **Search** button to display connected Annexus cameras.



- Select the detected camera in the list and click **Select**.



- In the *Select IP Camera* window, enter the default camera User Name: i3admin and default Password: i3admin, then click **Add**.

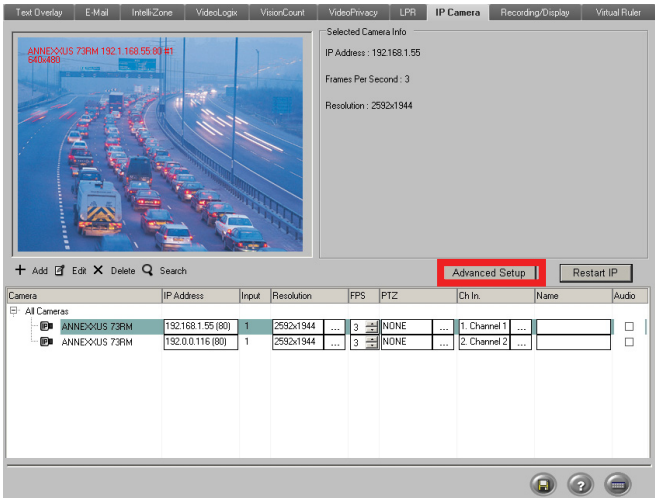
- The selected camera will be added to the IP Camera list. Assign the IP camera to the SRX-Pro video channel in the Ch In. column. Your Annexus camera is now connected to SRX-Pro Server and is ready to record. You may change resolution and frame rate for the Annexus camera in the *IP Camera* tab menu or you may choose to configure the camera's advanced settings (see the following section).

Camera	IP Address	Input	Resolution	FPS	PTZ	Ch In.	Name	Audio
All Cameras								
ANNEXUS 73RM	192.168.1.55 (80)	1	2592x1944	3	NONE	1. Channel 1		<input type="checkbox"/>
ANNEXUS 73RM	192.0.0.116 (80)	1	2592x1944	3	NONE	2. Channel 2		<input type="checkbox"/>

Tip: In SRX-Pro Server, ensure that Motion Setup, Schedule Setup and Storage setup tabs are correctly configured for video recording.

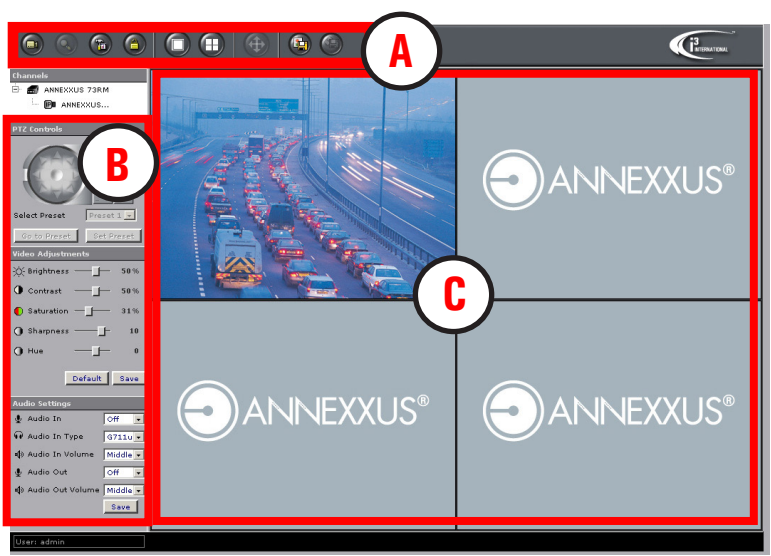
6. Advanced Camera Setup

To access Annexxus camera's advanced setup, go to Setup -> IP Camera tab, select the camera in the list of added IP cameras and click the **Advanced Setup** button.



The password window will be displayed.
Enter the default camera User Name: i3admin and default Password: i3admin.
Camera's user interface will be displayed in the Internet Explorer window.

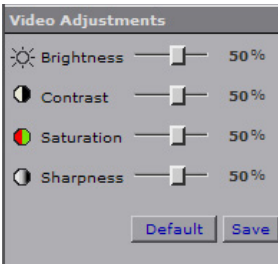
Camera's User Interface



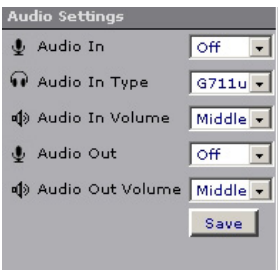
- A. Control Panel: Live Mode, Search Mode, Setup Mode,
- B. Camera Adjustments panels: PTZ Controls, Video Adjustments, Audio Settings
- C. Live Video viewing area.



In the **PTZ Controls** interface, zoom IN or OUT by clicking the corresponding icons.
 Ax73RM's motorized lens will re-focus the lens automatically, but focus can also be adjusted manually if needed.
 Click on the Focus NEAR and Focus FAR icons to adjust lens focus manually.



In the **Video Adjustments** interface, you may adjust your camera's Brightness, Contrast, Saturation and Sharpness levels.
 Click **Save** to save adjusted settings or **Default** to set all settings back to 50%.
Note: This panel is enabled in the Live View mode only and is disabled when in the Setup mode.



In the **Audio Settings** interface, you may adjust audio-related settings:
Audio In: Turn Audio In ON or OFF.
Audio In Type: Set Audio In encoding to G.711 A-law or G.711 μ -law (G.711u).
Audio In Volume: Set Audio In volume to Low, Middle or High
Audio Out: Turn Audio Out ON or OFF
Audio Out Volume: Set Audio Out volume to Low, Middle or High.

Click the Setup button to access Annexus camera Setup features.

6.1 Basic Setup

Click the Setup button to access Annexus camera Setup features.



Basic Setup tab will be displayed. You may switch to the Advanced setup mode at any time by clicking the button in the bottom left-hand corner. To switch back to the Basic Setup, click the same button again.

Basic Setup is divided into Camera and Network settings.

After making any setting adjustments, remember to click the **Save** button. It is recommended to make changes to one field at-a-time and save after each setting adjustment.



6.1.1 Camera Settings (Primary Streaming only)

Note: To configure sub-stream (Secondary Streaming), click the **Advance Setup** button. Secondary Streaming is used by SRX-Pro Server for faster live video display and remote streaming.

- Camera Name: The name of the camera will be displayed at the top of the Internet browser page.
- Video Codec: Set the compression mode to **H264 (Recommended)**, or MJPEG
- Resolution: Set the resolution of the recorded video to one of the following:

2592 x 1944 - 5MP (Recommended), QXGA (2048 x 1536) - 3MP, 1080P (1920 x 1080), SXGA (1280 x 960, 720P (1280 x 720), or SVGA (800 x 600).

- Frame Rate: Set the frame rate for the recorded video to 1, **3 (Recommended)**, 7.5, 12, 15 (unavailable with 5MP resolution), or 30 fps (unavailable with 3MP and 5MP resolution)
- Max Bit Rate (for H264 codec): Set the video bit rate within a 50-8000 kbit/s range. **Recommended** Max Bit Rate value: **2016 kbit/s**
- H264 GOP (for H264 codec): Set the GOP rate within a 1-60 range. GOP value is automatically adjusted to the same value as the Frame Rate. Lower GOP number results in a lower compression and larger video size. Higher number results in a higher compression and smaller video size. GOP rate determines the i-Frame frequency. **Recommended H264 GOP** value: **3**
- H264 Rate Control Mode (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate).
 - » **VBR (Variable Bit Rate) (Recommended)**: This setting will produce a variable bit rate video stream, however the video quality will remain constant resulting in high quality video images. Network infrastructure must be able to provide the set bandwidth to account for bit rate variations.
- CBR (Constant Bit Rate): This setting will produce a constant bit rate video stream at the cost of video quality. The quality may deteriorate considerably when motion is detected. This setting is beneficial for installations with limited bandwidth.
- Quality (for MJPEG codec only): HIGH, MID, LOW

Network settings:

- DHCP: Enable or Disable to have the network automatically assign an IP address to the camera.
- IP Address: Manually enter the camera's IP address here. This option should NOT be used if DHCP is enabled.
- Subnet Mask: Manually enter the camera's Subnet Mask here. This option should NOT be used if DHCP is enabled.
- Default Gateway: Provide the IP address of the network's router if necessary. Contact your network administrator for this information.
- DNS: Specify a DNS if necessary. Contact your network administrator for this information.
- Physical Address: This is the camera's unique MAC Address. It cannot be changed.

6.2 Video Setup

Switch to the Advanced Setup by clicking the **Advance Setup** button on the bottom left-hand corner of the screen as shown on the previous page. The Setup screen will change to reveal multiple setup tabs. Video Setup tab is displayed by default.

The screenshot shows the Video Setup interface with the following sections:

- Basic Settings:**
 - Camera Name: ANNEXIUS 73RM
 - TV System: NTSC
 - Mirror: Off
- Stream 1 - Primary Streaming:**
 - Video Codec: H264
 - Resolution: 2592x1944
 - Frame Rate: 3 fps
 - VBR Max bit rate: 2016 (kbit/s) [50-8000]
 - H264 GOP: 3 [1-60]
 - H264 Rate Control Mode: VBR
- Stream 2 - Secondary Streaming:**
 - Video Codec: H264
 - Resolution: 4CIF(704x480)
 - Frame Rate: 7.5 fps
 - VBR Max bit rate: 608 (kbit/s) [50-8000]
 - H264 GOP: 7 [1-60]
 - H264 Rate Control Mode: VBR
- Stream 3 - Third Streaming:**
 - Video Codec: H264
 - Resolution: None
 - Frame Rate: 12 fps
 - VBR Max bit rate: 1024 (kbit/s) [50-8000]
 - H264 GOP: 12 [1-60]
 - H264 Rate Control Mode: VBR
- Advance Settings:**
 - White Balance: Auto
 - White Balance - Manual:
 - R Gain: 64 [0-255]
 - G Gain: 64 [0-255]
 - B Gain: 64 [0-255]
 - Video Adjustments:
 - Brightness: 50 %
 - Contrast: 50 %
 - Saturation: 50 %
 - Sharpness: 10
 - Hue: 0

At the bottom left is a "Basic Setup" button, and at the bottom right is a camera icon.

6.2.2 Camera Settings

The screenshot shows the Basic Settings section of the Camera Settings interface with the following fields:

- Camera Name:** ANNEXIUS 73RM
- TV System:** NTSC
- Mirror:** Off

- **Camera Name:** The name of the camera will be displayed at the top of the Internet browser page.
- **TV System:** NTSC or PAL. To change the setting, access System setup tab.
- **Mirror:** Flips the video image. The options for mirror are:
 - » OFF: Do not use this feature
 - » FLIP: flip images vertically, upside-down.
 - » MIRROR: flip images horizontally, left to right.
 - » BOTH: flip both horizontally and vertically.

6.2.1 Dual-Streaming Setup Recommendations

i3's Annexus cameras support triple streaming, however, only two streams are being utilized by the SRX-Pro Server. Video settings for each stream can be configured separately.

Primary stream (Stream 1) is used for video recording and for Full-Screen live video display. Secondary stream (Stream 2) is used for remote video streaming and for split-screen mode live video display. SRX-Pro Server allows recording of both Primary and Secondary (sub-stream) video streams. i3 International recommends using Primary Stream to record the highest-resolution video image for identification purposes, and setting the secondary stream to lower-resolution, higher fps settings to facilitate faster remote video streaming. This combination of recommended video settings conserves and prolongs video storage, while taking advantage of high-resolution video images.

Recommended Video Settings for the Primary Stream (Stream 1):

Video Codec: H264

Resolution: Highest resolution offered by the camera.

Frame Rate: 1-3 fps, based on customer preference and camera's available frame rate options.

Recommended Video Settings for the Secondary Stream (Stream 2):

Video Codec: H264

Resolution: 4CIF (704x480)

Frame Rate: 7-10 fps, based on customer preference and camera's available frame rate options.

Recommended Video Settings for the Third Stream (Stream 3):

If using exclusively with SRX-Pro Server, disable Third Stream by selecting "**None**" from the **Resolution** drop-down menu.

If also recording video to SMTP or FTP Server directly from the camera, use recommended settings below:

Video Codec: MJPEG

Resolution: 4CIF (704x480)

Frame Rate: 12 fps, or based on customer preference.

6.2.3 Stream 1 - Primary Streaming

Primary stream (Stream 1) is used for video recording and for Full-Screen live video display in SRX-Pro Server.

Note: By default, SRX-Pro Server records only the main stream (**Primary Stream**). To record **both** main and sub-stream (**Secondary stream**), go to the Schedule setup tab in SRX-Pro Server and select "**Record main & sub streams**" radio button. This will allow the user to switch between the Main and Sub (Secondary) stream video in both Live and Search modes on SRX-Pro Server.

Recording Settings for All Channel

- ☐ Record main stream Only
- ☒ Record main & sub streams

Stream 1 - Primary Streaming	
Video Codec:	H264
Resolution:	2592x1944
Frame Rate:	3 fps
VBR Max bit rate:	2016 (kbit/s) [50-8000]
H264 GOP:	3 [1-60]
H264 Rate Control Mode:	VBR

- Video Codec: Set the compression mode to **H264 (Recommended)** or MJPEG
- Resolution: Set the resolution of the recorded video to one of the following:
 - » **2592 x 1944 - 5MP (Recommended)**
 - » QXGA (2048 x 1536) - 3MP
 - » 1080P (1920 x 1080)
 - » SXGA (1280 x 960)
 - » 720P (1280 x 720)
 - » SVGA (800 x 600)
- Frame Rate: Set the frame rate for the recorded video to 1, **3 (Recommended)**, 7.5, 12, 15 (unavailable with 5MP resolution), or 30 fps (unavailable with 3MP and 5MP resolution)
- Max Bit Rate (for H264 codec): Set the video bit rate within a 50-8000 kbit/s range. **Recommended** Max Bit Rate value: **2016 kbit/s**
- H264 GOP (for H264 codec): Set the GOP rate within a 1-60 range. GOP value is automatically adjusted to the same value as the Frame Rate. Lower GOP number results in a lower compression and larger video size. Higher number results in a higher compression and smaller video size. GOP rate determines the i-Frame frequency. **Recommended H264 GOP** value: **3**

- H264 Rate Control Mode (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate).
 - » **VBR (Variable Bit Rate) (Recommended):** This setting will produce a variable bit rate video stream, however the video quality will remain constant resulting in high quality video images. Network infrastructure must be able to provide the set bandwidth to account for bit rate variations.
 - » CBR (Constant Bit Rate): This setting will produce a constant bit rate video stream at the cost of video quality. The quality may deteriorate considerably when motion is detected. This setting is beneficial for installations with limited bandwidth.
- Quality (for MJPEG codec only): HIGH, MID, LOW

6.2.4 Stream 2 - Secondary Streaming

Secondary stream (Stream 2) is used for remote video streaming and for split-screen mode live video display in SRX-Pro Server.

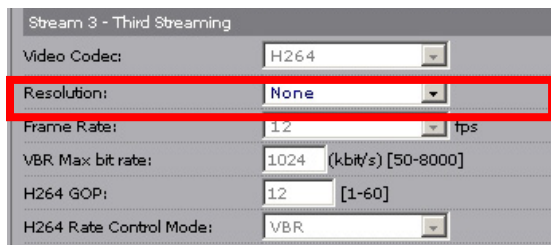
Stream 2 - Secondary Streaming	
Video Codec:	H264
Resolution:	4CIF(704x480)
Frame Rate:	7.5 fps
VBR Max bit rate:	608 (kbit/s) [50-8000]
H264 GOP:	7 [1-60]
H264 Rate Control Mode:	VBR

- Video Codec: Set the compression mode to **H264 (Recommended)** or MJPEG
- Resolution: Set the resolution of the recorded video to one of the following:
 - » 720P (1280 x 720)
 - » SVGA (800 x 600)
 - » **4CIF (704 x 480) (Recommended)**
 - » VGA (640 x 480)
 - » CIF (352 x 240) OR
 - » "None" to disable Secondary Streaming
- Frame Rate: Set the frame rate for the recorded video to 1, 3, **7.5 (Recommended)**, 12, 15 (unavailable when Primary Stream is set to 5MP resolution), or 30 fps (unavailable when Primary Stream is set to 3MP or 5MP resolution)
- Max Bit Rate (for H264 codec): Set the video bit rate within a 50-8000 kbit/s range. **Recommended** Max Bit Rate value: **608 kbit/s**

- H264 GOP (for H264 codec): Set the GOP rate within a 1-60 range. GOP value is automatically adjusted to the same value as the Frame Rate. Lower GOP number results in a lower compression and larger video size. Higher number results in a higher compression and smaller video size. GOP rate determines the i-Frame frequency. **Recommended H264 GOP value: 7**
- H264 Rate Control Mode (for H264 codec): **VBR (Variable Bit Rate) - Recommended** or CBR (Constant Bit Rate). *See Primary Streaming section for VBR vs CBR explanation.*
- Quality (for MJPEG codec only): HIGH, MID, LOW

6.2.5 Stream 3 - Third Streaming

Third streaming is not being utilized by SRX-Pro Server. If using exclusively with SRX-Pro Server, disable Third Stream by selecting **"None"** from the **Resolution** drop-down menu.



Stream 3 - Third Streaming

Video Codec: H264

Resolution: None

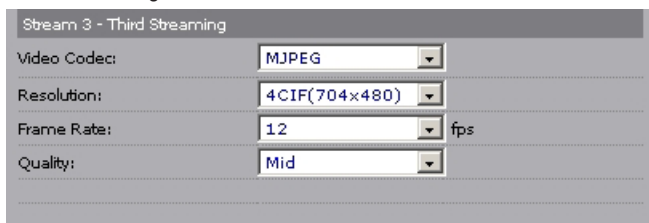
Frame Rate: 12 fps

VBR Max bit rate: 1024 (kbit/s) [50-8000]

H264 GOP: 12 [1-60]

H264 Rate Control Mode: VBR

If also recording video to SMTP or FTP Server directly from the camera, configure Third Streaming as follows:



Stream 3 - Third Streaming

Video Codec: MJPEG

Resolution: 4CIF(704x480)

Frame Rate: 12 fps

Quality: Mid

- Video Codec: Set the compression mode to **MJPEG**. Note, SMTP/FTP recording is allowed with MJPEG compression only.
- Resolution: Set the resolution of the recorded video to one of the following: SVGA (800 x 600), **4CIF (704 x 480) (Recommended)**, VGA (640 x 480), or CIF (352 x 240)
- Frame Rate: Set the frame rate for the recorded video to 1, 3, 7.5, or 12fps
- Quality: Set MJPEG video quality to HIGH, MID, or LOW.

6.2.6 Advance Settings

Advance Settings

White Balance:

Auto

White Balance - Manual

R Gain

64

[0-255]

G Gain

64

[0-255]

B Gain

64

[0-255]

Video Adjustments

Brightness:

50 %

Contrast:

50 %

Saturation:

50 %

Sharpness:

10

Hue:

0

- White Balance: Set White Balance mode to **Auto** or **Manual** according to the image's lighting conditions for the best color temperature.
- R Gain, G Gain, B Gain (Use when White Balance is set to Manual):
Adjust levels of red, green and blue in the image.
Values can be set from 0-255
- Brightness: adjust the image brightness level, Values range from 0% to 100%.
- Contrast: adjust the image contrast level. Values range from 0% to 100%.
- Saturation: adjust the image saturation level. Values range from 0% to 100%.
- Sharpness: adjust the image sharpness level. Values range from 0 to 15.
- Hue: adjust the image hue. Values range from 0 to 15.



After making any setting adjustments, remember to click the **Save** button to save any changes made.



6.3 Motorized Lens Setup

Motorized tab allows controlling the motorized lens of the Annexus 73RM camera by manually adjusting focal length and focus of the lens.



- Zoom Limit: Set Zoom Limit to X3 to use optical zoom only. Set to X30 to use digital zoom.
- Speed: Set lens adjustment speed to LOW, MEDIUM, or HIGH. Speed setting will determine how quickly the lens reacts to the setting commands.
- Zoom In/Out: Click the **In** or **Out** buttons respectively, to Zoom in or out. When in Live mode, use Zoom In/Out icons on the PTZ Controls panel to control focal length of the lens. 
- Manual Focus: Click the **Near** or **Far** buttons respectively to adjust the lens focus. Ax73RM's motorized lens will re-focus the lens automatically, but focus can also be adjusted manually if needed. When in Live mode, use Focus Near/Far icons on the PTZ Controls panel to controls lens focus manually. 
- Reset the camera to the default Zoom position & Auto-Focus: Press **Calibrate** to return the camera's lens to its default focal length and auto-focus.

6.4 Alarm/Motion (optional)

Alarm/Motion setup tab allows configuring camera's "edge" motion detection.

Note that this feature is **not** supported by the SRX-Pro Server. To detect motion on Ax73RM camera, configure Motion detection in the SRX-Pro Server's motion tab.

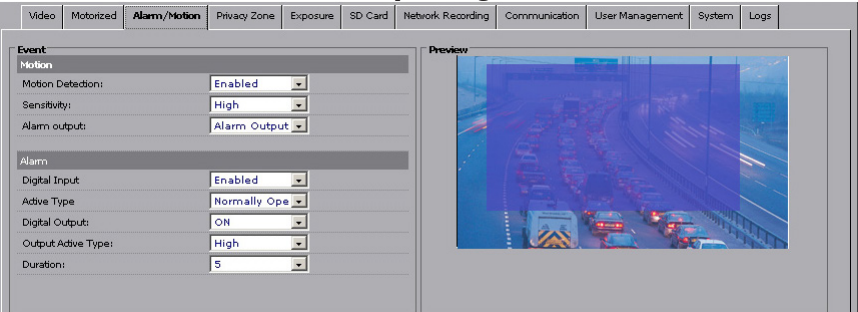
"Edge" motion detection, (motion detection performed by the camera itself, rather than SRX-Pro Server software), can be useful as a backup method of recording.

Video recording based on camera's "edge" motion detection can be recorded to a microSD card.

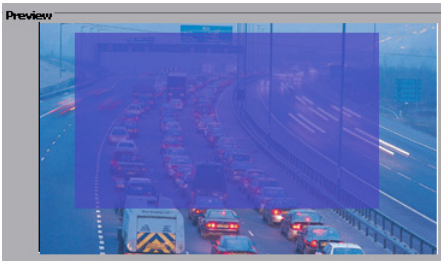
See *Section 3.3 I/O Connectors* to locate the microSD card slot on the camera. See *Section 6.7 SD Card* for information on how to enable “Edge” motion-based video recording.

“Edge” motion detection can also be used to trigger an E-mail being sent from the camera. See *Section 6.8 Network Recording* for information on how to configure the camera to send out an Email whenever “edge” motion has been detected.

6.4.1 Motion Detection Setup (“Edge”)



- Motion Detection: Enable or Disable camera’s “edge” motion detection.
- Sensitivity: When Enabled, set the Motion Sensitivity to HIGH, MEDIUM, LOW
- Alarm output: To enable Ax73RM camera’s Alarm Output when motion is detected by the camera, select “Alarm Output 1”. Then, set Digital Output to ON in the Alarm section below. To disable Alarm Output, select “None”. See *Section 3.3 I/O Connectors* for information on how to connect an Alarm Output to the camera.
- Draw the motion detection area in the Preview screen. Position your mouse cursor over the Preview window, press and hold the left mouse button. While holding down the left mouse button, drag the cursor to draw a rectangular area over the preview screen. Release the mouse button. The motion detection area rectangle will be shaded purple in the Preview window. Repeat to re-draw the motion detection area. Only one motion detection area can be drawn per camera. Any motion detected outside of highlighted area will be ignored by the camera. When motion is detected inside the highlighted area, a running man icon is displayed on the camera’s Control Panel.



6.4.2 Alarm Input/Output Setup

- Digital Input: Enable or Disable Digital Input (Alarm In / Sensor). See *Section 3.3 I/O Connectors* for information on how to connect an Alarm Input to the camera.
- Active Type: Set the sensor's type to Normally Open or Normally Closed as per sensor device specifications. (Normally Closed contact will carry electricity until it is activated; Normally Open contact will not carry electricity until it is activated).
- Digital output: Set the Digital Output (Alarm Out / Control) to ON or OFF. See *Section 3.3 I/O Connectors* for information on how to connect an Alarm Output to the camera. Digital Output must be set to ON to be used in conjunction with "edge" motion detection.
- Output Active Type: Set to High or Low. High is equivalent to Normally Open relay, Low is equivalent to Normally Closed relay.
- Duration: Set the Digital Output (Control) Duration/Dwell time to 1, 5 or 10 seconds.

After making any setting adjustments, remember to click the **Save** button to save any changes made.



6.5 Privacy Zone (optional)

In the Privacy Zone setup tab, select an area that needs to be blocked off with a rectangle on Live View and from video recording because of privacy or other concerns. Up to 5 separate Privacy Zones can be configured.

The image shows a software interface for configuring privacy zones. At the top, there's a tab labeled 'Privacy Zone'. Below it, on the left, is a 'Configuration' panel. This panel has a 'Color Setting' dropdown menu currently set to 'Grey'. Below this are five sections, each for a 'Privacy Zone' (1 through 5). Each section contains a 'Privacy Zone Enable' dropdown menu and an 'Apply' button. Privacy Zones 1 and 2 are set to 'ON', while Privacy Zones 3, 4, and 5 are set to 'OFF'. On the right side of the interface is a 'Preview' window showing a live video feed of a multi-lane highway with traffic. A blue rectangular overlay is visible on the highway, indicating a configured privacy zone.

- Color Setting: Select between BLACK, GREY and WHITE to determine what color will be used to block out the configured privacy zone.

To draw the privacy zone, follow these instructions:

1. Set the Privacy Zone Enable to **ON** to activate a privacy zone.
2. Position your mouse cursor over the Preview window, press and hold the left mouse button.
3. While holding down the left mouse button, drag the cursor to draw a rectangular area over the zone that needs to be concealed.
4. Release the mouse button. The privacy area rectangle will be shaded purple in the Preview window.
5. If you are not satisfied with the size or positioning of the privacy zone, repeat steps 2-4 to re-draw it.
6. Click the **Apply** button
7. Repeat Steps 1-6 for additional Privacy Zones, if using.



After making any setting adjustments, remember to click the **Save** button to save any changes made.

6.6 Exposure

Set the exposure level for your camera. Exposure time determines how much light passes through the camera aperture to the focus.

Exposure

Exposure Mode

☒ Auto Exposure

Exposure Mode: **AES**

Slow Shutter: **1/3.75**

Max Gain: **24** [24-36]

☐ Manual Exposure

Shutter Speed: **1/60**

Manual Gain: **0** [0-36]

Exposure Misc

EV: **0.6**

Day Night: **Auto**

Noise Reduction: **10** [0-255]

BLC: **OFF**

WDR: **OFF**

Gamma Correction: **1**

Reset Exposure

Preview

6.6.1 Auto Exposure

Select this option to correct the exposure automatically.

- Exposure Mode: Set exposure mode to AES, ALC or Flickerless.
- Slow Shutter: Set the shutter speed. Acceptable value range is from 1/30 to 1/3.75 sec. Select OFF to disable the feature.
- Max Gain: Set the maximum gain value. The higher value will enhance the video signal. Note that the noise will also be enhanced. Values range from 24 to 36.

6.6.2 Manual Exposure

Select this option to correct the exposure manually.

- Shutter Speed: Set the shutter speed. Acceptable value range is from 1/8000 to 1/60 sec.
- Manual Gain: Set the Manual Gain value. The values range from 0 to 36

6.6.3 Exposure Misc

- EV: Set exposure value between -2 and 2. Higher values produce brighter images.
- Day Night: Set the Day/Night setting to AUTO, COLOR or BW
- Noise Reduction: Set the Noise Reduction value. The values range from 0 to 255.
- BLC: When parts of the environment are poorly lit, BLC can be configured to compensate for inadequate lighting conditions. To configure the individual areas that will receive compensation, select one of the available options: UPPER 2 3rds, LOWER 2 3rds, CENTER 1 3rd, CENTER 1 6th, LEFT, RIGHT, or FULL. Enabled areas will be shaded in the Preview screen.
- WDR: Set the Wide Dynamic Range Level if desired. The WDR can be turned OFF, or set to HIGH, MIDDLE or LOW.
- Gamma Correction: Gamma Correction can be set to 0.45 or to 1.
- Reset Exposure: Click this button to restore camera default exposure values.

After making any setting adjustments, remember to click the **Save** button to save any changes made.



6.7 SD Card

SD Card tab allows enabling the microSD “edge” video recording. “Edge” video recording. Note that “Edge” video recording is independent from the SRX-Pro Server; video is saved directly to microSD card cannot be accessed, reviewed or backed up from the SRX-Pro Server. microSD recording can provide a valuable backup video recording option in case of network loss, for example.

The screenshot shows the 'SD Card' tab selected in a top navigation bar. Below the tabs is the 'SD Card Setting' window. It contains the following settings:

- SD Record Conditions:** A dropdown menu set to 'Motion'.
- Motion Recording Time:** A dropdown menu set to '10' with '(Second)' to its right.
- SD Card Usage:** A progress bar showing '1%' usage.
- SD card Format:** A button labeled 'SD Format'.
- OverWrite:** A dropdown menu set to 'ON'.

- SD Recording Conditions: Set microSD card recording to Alarm, Motion, Network Loss or OFF (to disable).
- Motion Recording Time: Set to 5 or 10 seconds. If Motion recording is selected, set the video recording duration, in seconds, after the motion has stopped.
- SD Card Usage: Displays the percentage of disk space used for video recording on the microSD card.
- SD card Format: Click the **SD Format** button to erase all data from microSD card. Click OK in the confirmation window, then wait for the “Format Complete!” message window and click OK to close it. Your microSD card is not empty and ready for recording.
- Overwrite: Set the video recording to ON or OFF. If Overwrite is disabled (OFF), no video will be recorded once the microSD card becomes full. If Overwrite is enabled (ON), video recording will be overwritten based on FIFO principle (first-in-first-out) once microSD card becomes full.

- **Alarm Recording:**

To record video to the microSD card based on Alarm Input (Sensor), the following conditions must be met:

1. Alarm Input must be properly wired to the camera (See Section 3.3 I/O Connectors for more information).
2. Alarm Input (Digital Input) must be Enabled and configured in the camera's Alarm/Motion tab.
3. microSD card must be inserted into the microSD card slot on the camera.
4. SD Card Record Conditions must be set to "Alarm"

- **Motion Recording:**

To record video to the microSD card based on Motion, the following conditions must be met:

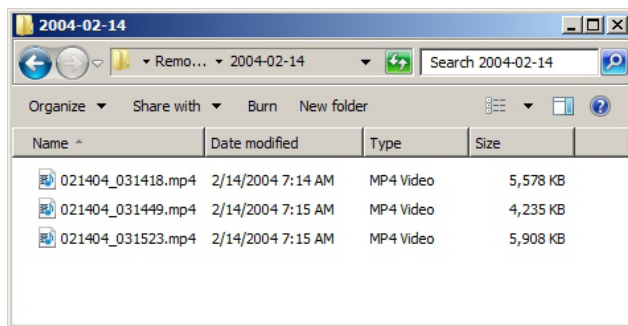
1. Motion Detection must be Enabled and the Motion Detection area must be highlighted in the Preview window of the camera's Alarm/Motion tab
2. microSD card must be inserted into the microSD card slot on the camera.
3. SD Card Record Conditions must be set to "Motion"

- **Network Loss Recording:**

To record video to the microSD card whenever network connection (to the SRX-Pro Server) is lost, the following conditions must be met:

1. microSD card must be inserted into the microSD card slot on the camera.
2. SD Card Record Conditions must be set to "Network Loss"

Video clips are saved to the microSD card in the *.mp4 format and can be played back in Windows Media Player, VLC player or another compatible media player.



After making any setting adjustments, remember to click the **Save** button to save any changes made.



6.8 Network Recording

Under Network Recording tab, Ax73RM series camera can be configured to send out an email alert every time motion is detected. It can also record video to a configured FTP server based on motion or on pre-set schedule.

Note: Only MJPEG video streams can be used with SMTP & FTP recording options. Set the Third Stream (Stream 3) option to MJPEG Video Codec in Video setup tab.

The screenshot displays the 'Network Recording' configuration window. It is divided into two main sections: 'SMTP Record' and 'FTP Record'.
SMTP Record Section:
- SMTP Record Conditions: MOTION
- SMTP Server: smtp.gmail.com
- Login ID: userlogin
- Password: [masked]
- Sender Email Address: youmail@gmail.com
- Port: 25
- Authentication: NO AUTH
- Note: Must be at least 1 MJPEG codec stream.
- Condition Settings for Sending Email by Alarm:
 - Subject: Alarm detected! Cam 1
 - Message: Alarm has been detected on your Ax73RM camera, installed in the loading dock.
 - Attach Image: ON
- Condition Settings for Sending Email by Motion:
 - Subject: Motion detected! Cam 1
 - Message: Motion has been detected on your Ax73RM camera, installed in the loading dock.
 - Attach Image: ON
- Email Address List:
 - 1. user1@companyemail.com (ON, ON)
 - 2. user2@yourownemail.com (ON, ON)
 - 3. [blank] (OFF, OFF)
FTP Record Section:
- FTP Record Conditions: OFF
- FTP Server: ipcam
- Login ID: guest
- Password: [masked]
- FTP Port: 21
- Note: Must be at least 1 MJPEG codec stream.
- Scheduled Recording Table:
 - Monday: ALL DAY
 - Tuesday: ALL DAY
 - Wednesday: ALL DAY
 - Thursday: ALL DAY
 - Friday: ALL DAY
 - Saturday: SCHEDULE1
 - Sunday: SCHEDULE2
- Scheduled Recording Settings:
 - Schedule 1: Start time: 9 AM, End time: 6 PM
 - Schedule 2: Start time: 10 AM, End time: 4 PM
 - Recording Cycle: 60 (Second)
 - File Name: rec_sche
 - Server Path: /cam
- Alarm Recording Settings:
 - Pre Recording Frame: 0
 - Pre Recording Cycle: 1 (Second)
 - Recording Frame: 10

6.8.1. SMTP Recording

Note: Only MJPEG video streams can be used with the SMTP recording options. Set the Third Stream (Stream 3) option to MJPEG Video Codec in Video setup tab

SMTP Server:

- SMTP Record Condition: Set to ALARM or MOTION to enable this setting.
- SMTP Server: Enter the SMTP Email Server address
- Login ID: Enter your SMTP Email Server login

This is a close-up of the 'SMTP Server' configuration section from the screenshot above. It shows the following fields and values:
- SMTP Record Conditions: MOTION
- SMTP Server: smtp.gmail.com
- Login ID: userlogin
- Password: [masked]
- Sender Email Address: youmail@gmail.com
- Port: 25
- Authentication: NO AUTH
- Note: Must be at least 1 MJPEG codec stream.

- Password: Enter your SMTP Email Server password
- Sender Email Address: Enter your email address
- Port: Enter the SMTP Server port
- Authentication: Select the SMTP Server's authentication type from NO AUTHENTICATION, SMTP PLAIN, LOGIN and TLS-TTLS

Condition Settings for Sending E-mail by Alarm/Motion:

To send an email to up to three email recipients based on Motion or Alarm detected by your Ax73RM camera, the following conditions must be met:

1. Alarm Input must be properly wired to the camera (See Section 3.3 I/O Connectors for more information).
2. Alarm Input (Digital Input) must be Enabled and configured in the camera's Alarm/Motion tab.
3. Motion Detection must be Enabled and the Motion Detection area must be highlighted in the Preview window of the camera's Alarm/Motion tab
4. SMTP Record Condition must be set to either ALARM or MOTION in the Network Recording tab.
5. Email recipient(s) must be configured in the Network Recording tab.

Condition Settings for Sending E-mail by Alarm

Subject: Alarm detected! Cam 1

Message: Alarm has been detected on your Ax73RM camera, installed in the loading dock.

Attach Image: ON

Condition Settings for Sending E-mail by Motion

Subject: Motion detected! Cam 1

Message: Motion has been detected on your Ax73RM camera, installed in the loading dock.

Attach Image: ON

- Subject: Enter the email subject
- Message: Enter the body of the email message in the corresponding Condition Setting for Sending Email by Alarm/Motion section.
- Attach Image: Set to ON to attach a snapshot to the motion- or alarm-triggered email message.

Email Address List:

- Configure up to three separate email recipients. Set ENABLE, ALARM, and/or MOTION settings to ON and enter the email address for each of the recipients in the corresponding field.

No.	Enable	Address	Alarm	Motion
1	ON	user1@companyemail.com	ON	ON
2	ON	user2@yourownemail.com	ON	ON
3	OFF		OFF	OFF

6.8.2. FTP Recording

Note: Only MJPEG video streams can be used with the FTP recording options.
Set the Third Stream (Stream 3) option to MJPEG Video Codec in Video setup tab

FTP Server:

- FTP Record Conditions: To enable, set to SCHEDULED, ALARM IN or MOTION.
- FTP Server: Enter the FTP Server address
- Login ID: Enter the FTP Server login
- Password: Enter the FTP Server Password
- FTP Port: Enter the FTP Port

Note: This feature works in conjunction with MJPEG codec only. Set Third Stream to MJPEG in order to record to an FTP Server.

The screenshot shows the 'FTP Server' configuration window. It contains the following fields: 'FTP Record Conditions' set to 'OFF', 'FTP Server' set to 'ipcam', 'Login ID' set to 'guest', 'Password' masked with four dots, and 'FTP Port' set to '21'. A note at the bottom states: 'Note: Must be at least 1 MJPEG codec stream.'

Scheduled Recording Table:

- Set the recording schedule type for each day of the week: OFF (to disable), ALL DAY, SCHEDULE 1 or SCHEDULE 2. Schedules 1 and 2 are configured directly below.

The screenshot shows the 'Scheduled Recording Table' with a table of days and their corresponding recording schedules. The table has two columns: 'Day' and 'Schedule'. The rows are: Monday: ALL DAY, Tuesday: ALL DAY, Wednesday: ALL DAY, Thursday: ALL DAY, Friday: ALL DAY, Saturday: SCHEDULE1, and Sunday: SCHEDULE2.

Scheduled Recording Settings:

- Schedule 1 and Schedule 2: Set the Start Time and End Time for your custom recording schedules.
- Recording Cycle: Set the length of the video clip. 5 ~ 120 seconds (2 minutes)
- File Name: Set the default video file name
- Server Path: Set the FTP Server path, where the video recordings will be stored.

The screenshot shows the 'Scheduled Recording Settings' window. It contains the following fields: 'Schedule 1' with 'Start time' at '9 AM' and 'End time' at '6 PM'; 'Schedule 2' with 'Start time' at '10 AM' and 'End time' at '4 PM'; 'Recording Cycle' set to '60' (Second); 'File Name' set to 'rec_sche'; and 'Server Path' set to '/cam'.

Alarm/Motion Recording Settings:

- Pre Recording Frame: Set the video frame rate for the video preceding the triggered alarm/motion. 1 ~ 10 frames per second
- Pre Recording Cycle: Set the length of the buffered video recording preceding the triggered alarm/motion. 1 ~ 30 seconds. The buffered video will be pre-pended to the video clip.
- Recording Frame: Set the video frame rate for the video that immediately follows the triggered motion or alarm. 1 ~ 60 frames per second
- Recording Cycle: Set the video recording length (in sec) that immediately follows the triggered motion or alarm. 1 ~ 120 seconds (2 minutes)
- File Name: Set the default video file name
- Server Path: Set the FTP Server path, where the video recordings will be stored.


Alarm Recording Settings	
Pre Recording Frame	0
Pre Recording Cycle	1 (Second)
Recording Frame	10
Recording Cycle	2 (Second)
File Name	rec_alarm
Server Path	/cam
Motion Recording Settings	
Pre Recording Frame	10
Pre Recording Cycle	30 (Second)
Recording Frame	10
Recording Cycle	2 (Second)
File Name	rec_motion
Server Path	/cam

After making any setting adjustments, remember to click the **Save** button to save any changes made.



6.9 Communication Setup

The Communication tab is used to configure network and communication settings on the camera.

Video	Motorized	Alarm/Motion	Privacy Zone	Exposure	SD Card	Network Recording	Communication	User Management	System	Logs
<div><div>Network Settings DHCP: <input type="button" value="Disabled"/> IP Address: <input type="text" value="192.0.0.17"/> Subnet Mask: <input type="text" value="255.255.255.0"/> Default Gateway: <input type="text" value="192.0.0.1"/> DNS: <input type="text" value="192.0.0.1"/> HTTP Port: <input type="text" value="80"/> Physical Address: <input type="text" value="{80,[1025-65534]}"/> SNMP SNMP V1: <input type="button" value="Off"/> SNMP V2: <input type="button" value="Off"/> SNMP V3: <input type="button" value="Off"/> SNMP V3 Username: <input type="text" value="initial"/> SNMP V3 Password: <input type="password" value="*****"/> Read Community String: <input type="text" value="public"/> Write Community String: <input type="text" value="private"/> Trap Enable: <input type="button" value="Off"/> Trap Host: <input type="text" value="192.0.0.1"/> Heartbeat Enable: <input type="button" value="Off"/> Heartbeat Host: <input type="text" value="192.0.0.1"/> Heartbeat Interval: <input type="text" value="30"/> Download MIB: <input type="button" value="Download"/></div><div>FTP Settings FTP: <input type="button" value="On"/> FTP Login ID: <input type="text" value="admin"/> FTP Password: <input type="password" value="****"/> Max Simultaneous Connection: <input type="text" value="10"/> [1-10] UPNP Settings UPNP: <input type="button" value="On"/> OSD Settings OSD Camera Name: <input type="button" value="Off"/> OSD Date Time: <input type="button" value="Off"/></div></div> <div><input type="button" value="Basic Setup"/></div>										

Network settings:

- DHCP: Enable or Disable to have the network automatically assign an IP address to the camera.
- IP Address: Manually enter the camera's IP address here.
This option should NOT be used if DHCP is enabled.
- Subnet Mask: Manually enter the camera's Subnet Mask here.
This option should NOT be used if DHCP is enabled.
- Default Gateway: Provide the IP address of the network's router if necessary. Contact your network administrator for this information.

Network Settings	
DHCP:	<input type="button" value="Disabled"/>
IP Address:	<input type="text" value="192.0.0.17"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
Default Gateway:	<input type="text" value="192.0.0.1"/>
DNS:	<input type="text" value="192.0.0.1"/>
HTTP Port:	<input type="text" value="80"/>
Physical Address:	<input type="text" value="{80,[1025-65534]}"/>

- DNS: Specify a DNS if necessary.
Contact your network administrator for this information.
- HTTP Port: Use the default Port 80 if possible. Contact your network administrator if the setting needs to be changed.
- Physical Address: This is the camera's unique MAC Address. It may not be changed.

SNMP settings:

Not required for normal functioning of this camera. These settings are reserved for troubleshooting and further development.

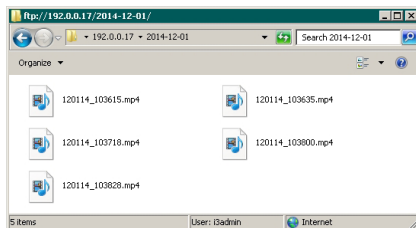
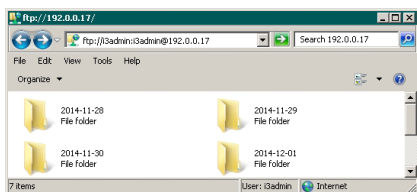
FTP Settings:

When configured, this feature allows remote connection to the microSD card inside the camera for remote video retrieval.

- FTP: Set to ON or OFF.
Must be set to ON to retrieve video recorded to microSD card remotely.
- FTP Login ID/FTP Password: Enter FTP login credentials.
- Max Simultaneous Connection: Enter the maximum number of remote FTP Client connections accepted by the microSD card. Note, this number does not limit the number of remote Internet Explorer connections.
- To view video recordings on the microSD card remotely, enter:
ftp://<Login ID>:<Password>@<IP address> in the address bar of an Explorer window. E.g. ftp://i3admin:i3admin@192.0.0.16. Time-stamped *.mp4 video recordings are stored in the individual time-stamped folders:
YYYY-MM-DD > MMDDYY_HHMMSS.mp4.
E.g. 2014-12-01 > 120114_103615.mp4 (Video was recorded on Dec. 1, 2014 at 10:36:15AM)

The screenshot shows a configuration window with three sections:

- FTP Settings:**
 - FTP: On (dropdown menu)
 - FTP Login ID: admin (text field)
 - FTP Password: •••• (password field)
 - Max Simultaneous Connection: 10 (text field) [1-10]
- UPNP Settings:**
 - UPNP: On (dropdown menu)
- OSD Settings:**
 - OSD Camera Name: Off (dropdown menu)
 - OSD Date Time: Off (dropdown menu)



UPNP Settings:

UPnP stands for Universal Plug and Play.

- UPnP: When set to ON, Ax73RM camera can be detected automatically by any computer on the same LAN without the need for the Annexus Finder utility. When multiple cameras with the default IP Address (<http://192.0.0.16>) are connected, however, Annexus Finder utility is still required for IP address re-assignment.

OSD Settings:

Enabled on-screen display information will be shown as text overlay over the video stream.

- OSD Camera Name: Can be set to ON (to show) or OFF (to hide) the Camera Name (set in Video setup tab)
- OSD Date Time: Can be set to ON (to show) or OFF (to hide) the camera's current Date and Time (set in System setup tab).

After making any setting adjustments, remember to click the **Save** button to save any changes made.



6.10 User Management Setup

User Management tab displays the list of users that have access to the Annexus camera. The username and password from this setup tab are used when connecting the camera to SRX-Pro Server.

Two types of user permissions exist: **Administrator** and **Viewer**. Administrator

Video	Motorized	Alarm/Motion	Privacy Zone	Exposure	SD Card	Network Recording	Communication	User-Management	System	Logs
<div><div>User List:<ul style="list-style-type: none">i3adminuser1user2user3user4user5</div><div>Modify User:<div>Current Username: <input type="text" value="i3admin"/></div><div>New Username: <input type="text" value="i3admin"/></div><div>Password: <input type="password"/></div><div>Confirm Password: <input type="password"/></div><div>Permission: <input type="text" value="Administrator"/></div><div><input type="button" value="Update User"/></div></div><div>Note: User can update user name only (when password & confirm password are empty).</div></div>										

users have access to the camera's setup settings, while Viewer may only view camera live stream. Each camera has one master Administrator user (i3admin) and five additional users that can be assigned either Administrator or Viewer privileges.

Note: The accounts may not be deleted but the passwords and user names can be changed.

6.8.1 Modifying User Accounts

To change the password, user name or permissions type for one of the user accounts, follow instructions below:

1. Select user account in the User List on the left hand side. E.g. user1
2. To change user name, enter new user name in the New Username field in the Modify User area.
3. To change the account password, enter the new password in the *Password* field and *Confirm Password* fields of the Modify User area.
4. To change permission type, select either **Administrator** or **Viewer** in the *Permission* drop-down menu.
5. Click **Update User** button to apply changes.
6. Click **OK** in the confirmation message.

The screenshot shows a web interface for user management. On the left, a 'User List' box contains a scrollable list of users: 'i3admin', 'user1', 'user2', 'user3', 'user4', and 'user5'. Below this list is a 'Note:' stating 'User can update user name only (when password & confirm password are empty)'. On the right, the 'Modify User' section contains input fields for 'Current Username:' (pre-filled with 'user1'), 'New Username:' (pre-filled with 'user1'), 'Password:' (masked with dots), 'Confirm Password:' (masked with dots), and a 'Permission:' dropdown menu currently set to 'Viewer'. A red rectangular box highlights the 'Update User' button at the bottom of the 'Modify User' section.

Reminder: Whenever a change is made to the Annexus camera user in the camera's Advanced Setup -> User Management tab, remember to update this information in the *IP Setup tab* of the SRX-Pro Server.

This block contains two screenshots. The top screenshot shows a table of cameras with columns: Camera, IP Address, Input, Resolution, FPS, PTZ, Ch In, Name, and Audio. Two rows are visible, both for 'ANNEXUS 73RM' cameras. The first row has IP '192.0.0.17 (80)' and the second has '192.0.116 (80)'. A red box highlights the 'Edit' button in the top toolbar and the first row of the table. The bottom screenshot is a dialog box titled 'Edit IP Camera'. It has two tabs: 'IP Camera Info' and 'User Accounts'. The 'IP Camera Info' tab is active, showing fields for Model ('i3 GFi'), IP Address ('192.0.0.17'), Port ('90'), Server MAC, Server Subnet, Server Gateway, Video Input ('1'), and Name. The 'User Accounts' tab is also visible, showing 'User Name' ('i3admin') and 'Password' (masked). A red box highlights the 'User Name' field in the 'User Accounts' tab. At the bottom of the dialog, there are 'Undo', 'Update' (highlighted with a red box), and 'Close' buttons. A note at the bottom states 'Note: Public IP address isn't supported in Edit Mode.'

6.9 System Setup

In this section, you can configure basic camera system settings.

- Date & Time: Displays the camera's current date and time
- Date formats include: YYYY/MM/DD, MM/DD/YYYY and DD/MM/YYYY.
- New Date & Time: You may choose to...
 - » Set the Date and Time **Manually**
 - » Synchronize Date & Time with **Computer Time** or
 - » Synchronize Date & Time with **NTP Server**.

The screenshot shows the 'System' configuration tab. The left sidebar has 'Date & Time' selected. The main area is divided into two panes. The left pane, 'Date & Time', shows 'Current Date & Time' as 12/1/2014 11:28:04 and 'Date Format' as MM/DD/YYYY. It offers three methods to set the time: 'Set Manually' (with date and time pickers), 'Synchronize with Computer Time' (showing 'Mon Dec 1 11:28:05 PST 2014'), and 'Synchronize with NTP Server' (with fields for NTP Server, Time Zone, and Sync Period). The right pane, 'System Information', shows 'Current Version Description' with fields for Model Name (ANNEXIUS 73RM), MCU Version (0), Firmware Version (00_034-48), and TV System (NTSC). Below this is an 'Update firmware' section with 'Browse...' and 'Upload' buttons. Further down are buttons for 'Restart Camera', 'Factory Reset', and 'Hard Factory Reset'. At the bottom, the 'Configuration Settings' section includes 'Export Configuration' and 'Import File' buttons.

System Information > Current Version Description:

This section contains information on the Camera's Model Name and Firmware version. Change the Camera TV System between NTSC and PAL if it currently doesn't match your local standard.

System Information > Update Firmware:

All Annexus-series cameras are sold with the most recent version of the firmware already installed. If in the future firmware updates are released, you can update your camera's firmware by first downloading the firmware file from i3 International's website or FTP site. After downloading firmware file, click the **Browse...** button in the camera's System setup tab and locate the new firmware file. Then click the **Update** button and wait while the firmware is being updated on your camera.

Note: Be sure to stop all camera operations prior to an update. Do not turn off power or disconnect from the network during the process.

Click **Restart** Camera after you have updated firmware successfully.

Restart/Reset:

- Click **Restart Camera** to restart your Annexus-series camera. This will cause a temporary disconnect, no video will be recorded while the camera is restarting but all custom settings will be saved. Camera restart is required after the firmware update. After clicking, a pop up will appear asking you to confirm. Click **Yes**.
- Click **Factory Reset** to return all settings, except for the Networking (IP) settings to factory defaults. After clicking, a pop up will appear asking you to confirm. Click **Yes**.
- Click **Hard Factory Reset** to return all camera settings, including IP address, to factory defaults. After clicking, a pop up will appear asking you to confirm. Click **Yes**.

Note: Your Network Camera's default IP address is **192.0.0.16** and the default Subnet mask address is **255.255.255.0**.

System Information > Configuration Settings:

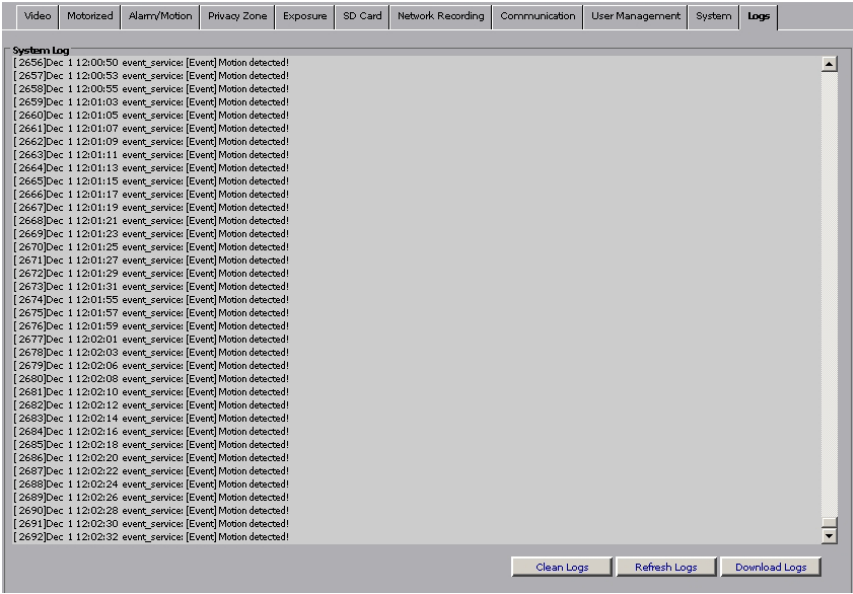
- Click **Export File** to export your camera's settings. If you have multiple cameras of the same model and you would like to apply a set of customer settings to each one, exporting the configuration file may save time.
- Click **Browse** to locate a configuration file to apply new settings to your camera and click **Import File**.

After making any setting adjustments, remember to click the **Save** button to save any changes made.



6.10 Logs

Logs setup tab displays camera event log records.



- Clean Logs: Erases all log records
- Refresh Logs: Update the list of current event logs
- Download Logs: Click to export all event log records into a text *.log file.

7. Specifications

Features/Model	Ax73RM
Image System	
Image Sensor	Progressive Scan CMOS 1/3.2" sensor
Signal System	NTSC/PAL
Optical System	
Iris Control	Auto Iris
Focal Length	Motorized 3 ~ 9mm
F-stop Range (F-number)	1.2
Horizontal FOV (Field of View)	78° ~ 28°
Day / Night	Mechanical ICR
Electric	
Digital Noise Reduction	3D
WDR	Enhanced Digital WDR
Minimum Illumination	F:1.2, CL: 0.3 lux@ 50IRE, B/W: 0.01 lux@ 50IRE, IR LED ON: 0 lux
S/N Ratio	50dB (AGC off)
Gain Control	Off/On, Selectable
White Balance	ATW(2800K ~ 8500K) / Manual
Electric Shutter	NTSC: 1/7.5 ~ 1/10000 sec, PAL: 1/6.25 ~ 1/10000 sec
Video Out	Composite Video Out (x1)
On-board Storage	micro SDHC Card (sold separately)
Alarm In/Out	Alarm In x1 / Alarm Out x1
Back Light Compensation	Off / On (7 Area Selectable)
Network Specifications	
Video Streaming and Compression Method	Triple Streaming H.264 / Motion JPEG
Frame Rate	NTSC: 1080P (1920x1080) @30fps; 3M (2048x1536) @15 fps; 5M (2592x1944) @12 fps; PAL: 1080P (1920x1080) @25fps; 3M (2048x1536) @15 fps; 5M (2592x1944) @12 fps;
Resolutions	5M (2592x1944), 3M (2048x1536), 1080P(1920x1080), SXGA(1280x960), 720P(1280x720), SVGA (800x600), 4CIF (NTSC: 704x480 / PAL: 704x576), VGA (NTSC: 640x480 / PAL: 640x576), CIF (NTSC: 352x240 / PAL: 352x288)
Network Protocols	IPv4, HTTP/HTTPS, TCP, RTP/RTCP/RTP, ICMP, UDP, IGMP, DNS, DHCP, ARP, NTP, SNMP, UPnP, SMTP
Security Access	Multiple privilege control with password protection
Users	1 Administrator, 5 Viewers
Audio	
Audio In/Out	Audio In/Out
Audio Format	G711-Alaw / G711-Ulaw

The specifications are subjects to be change without notice

Features/Model	Ax73RM
Other Features	
Privacy Zone, Motion Detection, Slow Shutter	Yes
Gamma correction	0.45/1
Other	System Log, FTP Record, Email Notification, User Management
Mechanism	
Dimensions	ø147 mm x 158 mm (H) (ø5¾" x 6¼" (H))
Weight	approx. 1250g (2.75 lb)
Connectors	Network: RJ45; Power input: 2-pin removable terminal block; Audio in/out: 8-pin removable terminal block; Alarm in/out: 8-pin removable terminal block
IR	
IR Distance	15M
IR LED	24 pcs
IR Wavelength	850 nm
Power Supply	
Power Requirement	PoE IEEE 802.3af class 0/ AC 24V
Power Consumption (max.)	PoE (11.5W) / AC24V (26W)
Temperature Control	On-board heating device (by PoE/AC24V)
Defog Control	Patented thermal defog dome bubble (by AC24V)
Surge Protection	EN55024 certified
Environment	
Operating Temperature	-40° C ~ 50° C (-40° F ~ 122° F)
Operating Humidity	90%, non-condensing
Power-On Temperature	Power-on support at -40°C (by PoE/AC24V)
Storage Temperature	-20° C ~ 60° C (-4° F ~ 140° F)
Storage Humidity	90%, non-condensing
Regulations, Ratings	FCC Class B, IP66, IK10, ONVIF
Warranty	1 year

The specifications are subjects to be change without notice



i3 INTERNATIONAL INC.

1.866.840.0004
www.i3international.com

U.S.A. 1967 Wehrle Drive,
Suite 1, PMB# 034 Buffalo
NY, 14221

Canada 780 Birchmount Road,
Unit 16, Scarborough,
ON, M1K 5H4